PALLAS ARMATA,

OR

Militarie Instructions for the Learned:

And all Generous Spirits, who affect the Profession of Armes.

THE FIRST PART.

Containing the Exercise of Jnfanterie, as well Antient, as Moderne: Wherein are Clearelie set downe *all the Postures and Motions, belonging to Battaillions of Foote.*

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TO THE RIGHT HONORABLE, and NOBLE LORD,

IOHN Earle of Rothes, Lord Leslie, &c.

MY Noble Lord,

It is not vnknown to Your Lo. what perfect cõcord is betweene Mars *and the* Mules, *and how much the Brane & renowned Persons of Antient times were endued with the knowledge, both of* Letters *and* Armes, *that both in Peace & Warre, they might be serviable vnto their Countrie:* Epaminondas, Themistocles, Aristides, Phocion, Alcibiades, *and manie other Braue* Grecians, *As also* Fabius, Cato, Piso, Pompeius, *and manie other excellent* Romans *can beare witnesse: But the* Grecians *did excell all Nations in both, and were the first, that out of a long practice & experience, reduced the knowledge of* Armes *to an Arte, and gaue instructions for right exercising and due ordering of a Battel: for which effect, they had Schoole-Masters called* Τακτικοι, *who taught the Arte Militarie: whose precepts the* (a) Romans *themselues thought no disparaigement to put in practice, & commit to writ: Wherfore a well gouerned Common-wealth, ought to haue a care, so to instruct her Children, that they may be steadable to Her both in Peace and Warre: And a well affected Subject ought to enable himselfe to doe seruice to his Countrie, by the studies, both of* Mars & Minerva. *Hence is it that I, although least in power, yet not the last in affection, haue euer endeuoured to enable my selfe to serue my King and Countrie, both by Booke and Sword, and applyed my minde in my Trauels, to learne and practise all that I could in the Arte Militarie: wherin, what I haue obtained by mine own experience, studie, or conference with learned Souldiers, I haue adventured to publish for the vse & benefite of my Countrie-men, and chiefelie of my fellow Lawers, not so much that I thinke anie Workes of mine worthie of light; but onelie to*

(a) Veget. de re milit. lib. 3. in Prologo.

ſtir vp thoſe of better ſpirits to do more perfectly in this ſubject. This Treatiſe I haue preſumed to Dedicate vnto your Lo. in reſpect the matter doeth much become You, as well for the martial Vertues already ſhining in You, as for the Simpathy that your honourable Birth and Nobilitie hath with this ſubject of which I treat, being Warre and Armes: VVarre, the exerciſe of true Courage and Fortitude, the Arte and paſtime of Kings & Princes, the Theatre of Honour and Glorie: And therefore a fitte Court for your Lo to walke into, who aimes at nothing, but what is Noble, Heroicke, and Glorious. And moreouer, your Lo. being not onlie a Fauorit of Mars *but alſo of* Minerva, *hauing your minde equallie affected, & perfected in the ſtudies, both of War & Peace (although your yeares and the quietnes of by paſt times, in the firſt, hath not yeelded you much experience) deſerueth to bee crowned, as well with the* Laurell *as the* Oliue *and therfore fitlie choſen by me to be a Protector to Armed Gowne-men, ſeeing moſt juſtlie, yee deſerue to bee a Tutelar Patron to men of both profeſſions; So that men of Armes ought to offer vnto You, as to their* Mars, *& men of learning ought their vowes vnto You, as to their* Apollo. Pirhus, Hannibal, & Iulius Cæſar, *the braueſt Generals that euer liued, were both learned, & Martiall, & did uſe the Penne no leſſe, than the Pick as their memorable exploites, & their choiſe writtings doe teſtifie: The works of* Cæſar *are amõgſt our hãds: the writtings of the other two, are periſhed by the iniurie of time, but were extant in the days of* (b) Æliã Plutarch *& Æmilius Probus. Great* Alexãder *himſelf is not renowned ſo much for his many Diademes, as that he did delyte in the vnderſtãding of the* Acroamaticke *Sciences: Of thoſe Hercicke Spirits Your Lo. is a liuelie image, who trãding their honourable ſteppes, doeth imitate them both in learning and Martiall courage. I will not heere ſpeake of the compleatneſſe of your other eminent Graces and Vertues wherewith yee are endued farre aboue your yeares (without any blemiſh of vice:) of your beautifull Perſonage, your admirable Prudence, your rare & pregnãt Wit, Your gratious affabilitie,*

(b) Ælian. Tact. lib. 1. cap. 1. Plutarch. in Pirro. & in Hanib. Emil. Prob. in Hanib.

and

and courtesie, the onelie token of a true Noble mind, your zealous affection to doe service to your KING and your Countrie, Your forewardnesse to assist and advance all honourable enterprisses, your singular judgement and vnderstanding in affaires of all Natures, and the rest of your eminent and conspicuous Vertues, whereby Yee adorne and decore your Noble Race, which is one of the most Antient, and most Illustrious of our Kingdome: So that I may boldlie affirme, that Your Lo. in the Hight and Aboundance of all Honourable and Heroicke Vertues, doeth Excell, and Shinne amongst the rest of the Nobilitie of our Age.

Sicuti inter Stellas,
Luna Minores.

And therefore, how can I who am φιλαρετης, *but loue and admire in You, that* πεναρετον, *which most gloriouslie shinneth in You, to the admiration of all men. I haue offered these instructions to your Lo. vew and protection, that vnder the shaddow of your name they may bee sheltered from the envious censure of the Critickes of our time, who are more readie to reproue, thā to amend, to carpe, than to set foorth of their owne. Neither doe I offer this tribute to your Lo. as to adde anie thing vnto your knowledge, whose minde is plentifullie enriched with the perfection of all noble Artes, and Sciences, But onelie to testifie my humble and bound duetie to your Lo. For, the honour that I haue to be tyed to Your Lo. by Blood, being discended of your House, by my Grandmother, doeth oblish me to consecrat all my endevours vnto You. Wouchsafe then My Thrise Noble Lord, out of your gratious generositie, fauourablie to accept, and protect this poore Present of mine, and to esteeme the Author thereof to bee for euer.*

Your Lo. most humble
and affectionate Servant,
T. K.

Y

To His Fellow Advocates.

YEe are not forgetfull (worthy Colleagues) when I entered into your Societie: how I spake of the great Harmony that was betweene Mars and Minerva, and the neceſſitie of their coherence, although the Ignorant vulgare conceaue in them, a great repugnance and contrarietie: And how that I comming from my trauells, where I had ſtudied to better my minde, aſwell with the knowledge of Armes as of letters, and had laboured to approue my ſelfe ſuch a one.

Quem fora pacatum bellantem caſtra decerent.

did enter in iudiciariam Palæſtram, where with you I might

Exercere Togatæ,
Muncra Militiæ ——& ſine Sanguinis hauſtu,
Mitia legittimo ſub judice bella movere.

But now the tymes are changed, according to the Diſpenſation of the Almighty, and euer-turning viciſſitude of the World: The Temple of Ianus which hath beene long ſhut, is now opened, & there is an Invaſion threatned by the Enemies of this Kingdome: It is your partes to put off your Gownes, and to take the Sword in your hands for defence of your Country: Yee are Patrons of all men in this State, and with your tongues yee defend their Lands, & their goods as your Clients, and ought yee not aſwell to proue Patrons to them, when not their goods and their Lands, but their lifes, and their libertie are in queſtion, & not theirs, but your owne alſo: & not only theirs and yours, but the Honour of our Prince, the ſafetie of our Country, the ſtanding of our State is in danger: Nunc pro aris & focis dimicandum eſt. Yee haue examples of this, in Ancient times, and all well gouerned Common-wealthes had their men ready for both: The fountaine of Greeke eloquence Demoſthenes (to omite Pericles, Themiſtocles, Alcibiades, Epaminondas, and many other Braue Grecians, who did excell both in learning and faits of Armes) was a reſolute Souldiour and did uſe the Sword for defence of his Countrie (although Plutarch moſt vniuſtly blaſmeth his courage, with the note of couardice at Thermodon) and did behaue himſelf very valiantly in all exployts, as he ſhewed at the taking in of (a) Pilus from the Lacedemonians, & in overthrowing the Peloponeſians, who exceeded him farre in number. All the

(a) Polyenus Stratag. lib. 3. in Demoſt.

Graue Romã Orators: The Fabii, Camilli, Scipiones, Pisones, &c. were also expert Souldiers, and beeing In utraque militia sagata & togata pariter exercitati did as good seruice to their Country in time of warre with their Swords, as they did in time of peace in their Robbes. And there was none of eminencie amongst them that did not enable himselfe to bee such a one, who

Si bella vocabant,
Miles erat, si pax positis toga gestiat armis.

Cato was a graue Orator and braue Souldier, and did write of the Arte Militarie. Plutarch in his life setteth downe his valiant actes against Antiochus & testifies of his learned writings (b) Vegetius sayeth thus of him: Cato ille maior cum & armis invictus esset, & consul exercitum sepe duxisset, plus se reipublicæ credidit profuturum si disciplinam militarem conferret in literas, Nam unius ætatis sunt res quæ fortiter fiunt, quæ vero pro utilitate Reip. scribuntur æterna sunt: And in another place, he citeth (c) his Books, de disciplina militari, which by iniurie of time are perished. The Prince of Latine Oratours himselfe if he had not bene sufficientlie instructed in the knowledge of Armes, hee could neuer haue acted his part so brauelie in preseruing the Common-wealth from the coniuration of Catiline: And hauing the Roman Armie committed vnto his charge in Cilicia did wisely & valiantlie carie himselfe in all exploites, and gained such notable victories at Amanus, that he was declared Imperator, & a Triumph (d) decerned vnto him by the Senat, which out of a humble modestie hee refused. A short narration of this, ye shall finde in his owne (e) Epistles: And in diuerse of them, hee stileth himselfe M. T. Cicero Imperator: That hee did alike worthilie behaue himselfe in his Armes as in his Gowne for his Countrie, yee shall see the testimonie of Cato in an Epistle to him: (f) M. Cato. M. Cicer. Imperatori. S. P. D. Quod & Resp. me & nostra amicitia hortatur libenter facio, ut tuam virtutem innocentiam diligẽtiam cognitam in maximis rebus, togati domi, Armati foris, pari industria administrari gaudeam. Calphurnius Piso, descended of the Noble and warlike house of the Pisones To whom it is saide, Armorumque decus præcede forensibus actis, was himselfe a braue and renowned Warriour, and also such a facound & eloquent Orator, that, how much hee did by his discourse in pleading, rauish the heart of the Iudge, and by his forceable speaches moue his minde to sorrow, ioy, anger, or any passion hee pleased, may bee seene in these words,

(b) Veget de re. milit lib. 2. cap. 3.

(c) Veget de re. milit. lib. 1. cap. 15.

(d) Plut in Cicer.

(e) Epistola. lib. 2. ep. 10 & lib. 15. ep. 4.

(f) Epistolar. lib. 15. ep. 5.

Laudibus

(g) Laudibus ipſa tuis reſonant fora: namque ubi Piſo
Iudicis affectum, poſſeſſaque pectora tentas
Victus ſponte ſuâ ſequitur quocunque vocaſti,
Flet ſi flere libet, gaudet gaudere coactus,
Et te dante capit judex ſi non habet iram. (g) Lucan. ad Piſonem.

And thereafter,

Quis non attonitus judex tua reſpicit ora?
Quis regit ipſe ſuam niſi per tua pondera mentem.

I will giue yon but one inſtance of our owne dayes: Braue Deſdiſguieres, *ſo much beloued of* Henrie *the Great, the late French King, was an Advocat in the Parliament of Aix, and finding that hee might bee alſo ſteadable to his Countrie by the Sword, did take Armes, and by long and fortunate ſervice came to that perfection of the arte Military, that for his martiall valour he was both honoured at home, by receiuing the Supreame Dignitie of his Kingdome, & was alſo ſuch a terrour to the Enemies of his Countrie, that I haue ſene them affright their children, with the name of* Aldiguera. *But what doe I talke of Mortalitie? The fountaine of all Artes and Sciences, The Eternall Himſelfe is a Souldier as the* (h) *Scripture ſayeth:* The Lord is a Man of Warre, His Name is IEHOVAH. *But I will goe further on with you, and euidentlie proue the profeſſion of Armes, not onelie to become your profeſſion & fitlie to bee ioyned therewith, but alſo to bee farre more Noble & more excellent, then yours, or any other elſe: I will not produce Teſtimonies from martiall men, leaſt yee reiect them as partiall, but I will bring an irrefragable concluſion from him, whoſe ſentence I hope yee will not decline, and it is from your owne Doctor and Maſter, who although out of an inconſiderat Poeticall humour, did cry,* Cedant arma togæ: *Yet when hee was in his owne ſetled and wiſe diſpoſition, hee freelie confeſſeth the veritie, and ſayeth.* (i) Ac nimirum (dicendum eſt enim quod ſentio) Rei militaris virtus præſtat cæteris omnibus, hæc nomen populo Romano, hæc huic urbi æternam gloriam peperit, hęc orbem terrarum parere huic imperio coegit: Omnes urbanæ res, omnia hæc noſtra præclara ſtudia, & hæc forenſis laus & induſtria, latent in tutela, ac præſidio bellicæ virtutis: *And immediatelie before, hee ſaid;* Multo plus affert dignitatis res militaris quam juris civilis gloria; Vigilas tu de nocte ut tuis conſultoribus reſpondeas, ille ut quo inté lit mature cum exercitu perveniat; te gallorum, illum buccinarum cantus exſuſcitat, tu actionem inſtituis, ille.

(h) Exod. chap. 15. verſ. 3.

(i) Cicero in Orat. pro L. Murænâ.

le acie instruit, tu caves ne tui consultores, ille ne urbes aut castra capiantur. *And a little thereafter,* Summa dignitas est in iis quæ militari laude antecellunt, Omnia enim quæ sunt in Imperio & in statu civitatis, & iis defendi & firmari putantur: summa enim utilitas, siquidem eorum consilio & periculo cum republ. tum etiam nostris rebus perfrui possumus: *What can be better and more truelie saide for the Dignitie & Excellencie of Militarie profession? Since then the carying of Armes is a thing so Noble, so Generous, so besitting your profession, I doubt not but yee will all applie your mindes to the understanding and practice of the Arte Militarie: For yee haue Strength, Courage, Iudgement, Learning, and other qualities besitting a perfect Souldier: and in this yee adde great praise and happinesse to your Countrie: Seeing* (h) Nihil est neque firmius, neq; laudabilius, neque fœlicius republica in qua abundant milites eruditi: *I haue set downe some Militarie instructions for your vse, which I haue learned by sight and practice abroad in my Trauells, or by discourse of learned Commanders, or by my owne reading: Whereby I doe not presume to instruct You, whose knowledge exceedeth mine in all things, but onlie to stirre vp you of greater gifts, than I, not onlie to take the Penne and publish more perfectlie in this kinde, but also to put the same in practice, as I haue done, either abroad, or at home, for service of your Countrie.* For Bellona *and* Minerva *are my two Mistresses, whom I haue this long time equallie Courted, whose Service I haue with equall affection prosecuted, although of them I haue obtained but small Fauours, beeing alwayes infortunate in my loue: Yet if anie of you of better merite wil giue attendance vpõ them, yee may bee better rewarded, and in this loue, I will not envye, but will cherrish my Corrivalles, and shall bee readie to impart to anie the small fauours which I haue receiued. So that at this time I haue set downe in the first part of my Treatise, as copiouslie & perspicuouslie as I could, the moderne Exercise of* Infanterie, *and hath clearlie described all the Postures and Motions belonging to Companies, of Foote, together with their vse, and manner how to performe them, and hath illustrate them by precepts of the best Tactick writters* Ælian, *& the Emperour* Leo, *giuing you their owne wordes, & confirming them by examples of practice, of the braueſt Greeke Commanders, to show you a conformitie betweene the Auntient Militarie Discipline and our Moderne. I doubt not therefore (worthie Colleagues) but yee will follow out reallie, that which I haue aymed*

(h) Veget. de re milit. lib. 1. c. 1 3.

at

at; & hereafter accustome your selues to doe service to your Countrie, as well by the Sword as the Gowne, Seeing it is a thing so Generous, so Honourable, & so convenient for your calling: I speake not to Base Spirits, whose onelie happinesse is to line in a brutish sensualitie, and to deride all Vertue, But to the Generous minded, who by following Vertue: and doing actions worthie of memorie; are desirous,

Ipsorum ut vivat post funera fama.

Those I loue, those I honour, to those I offer my endeuours, and to those I will bee while I liue.

An affectionate Friend and Servant.

T. K.

To the indifferent Reader.

NOBLE, worthie, and courteous Reader: although I haue set out this Treatise, principally for the use of my Fellow-Lawers, coting the chiefe instructions and termes of Ælian and Leo (the best Masters of the Arte Militarie) in their owne Idiome; yet I haue had a care to put the same passages in our language for the use and profite of those who vnderstand not the Greeke tongue, and haue set downe a plaine description of all the Motiones of Infantery, with a demonstration of them in figures, so that I thinke they shall be facile and perspicuous to the meanest capacitie, whereby I hope the Noble and worthy-minded Reader shall be allured, not only to a further vnderstanding of Martiall exercise, but also animated to put the samine precepts in practise for the well and seruice of his Country. For I hope, hee is not ignorant of the worth and dignitie of the Arte Militarie: and how much It, and the professours thereof, haue euer beene esteemed in the World. (a) Lycurgus in his Lawes did Ordaine, that no Epitaphe should bee made, nor no mans Name remembred vpon his Tombe, except of him who had beene a Souldier, esteeming them only worthy of memorie. When the seuerall Prouinces of Grecia sent their Ambassadoures to (b) Artarxerxes, King of Persia, he preferred Pelopidas & the Theban friendship to the rest, because hee heard they were the best Souldiers, & best practised in the faites of Armes: not respecting the wealth & power of the Athenians, Spartans, & other Cities. Philip of Macedone King of a poore Country, by exactly learning the Exercise of Armes, & practising a new militarie discipline inuented (as some say) by himselfe, did not only frie his Kingdome from the oppression of the Pœonians & Illirians, but also subiected the most goodly rich Prouinces and Cities of Grecia to his Crowne: So that making a preparation against the Persians, he died, and left his young Sonne Alexander successour of his Kingdome, and of his Designes, who beeing carefullie instructed by his Father in the discipline of Armes, and surpassing him farre in martiall valour, Vt Telamonem Aiax vt Pelea vicit Achilles, did not only execute his Fathers designes against Darius, by overthrowing him in two great Battells, but also in a shorte time did ouercome and subdue the most populous Kingdomes of Asia; And by terrour

(a) Plutar. in Lycurgo.

(b) Plutar. in Pelopida.

terrour of Armes, made all the World to tremble at his Name. The Romans rose from nothing to bee Masters of the World, by no other meanes, but a continuall Exercise of Armes: and when through lazinesse, they left off their use, they were ouer-runne, by the barbarous Gothes and Vandals: And in the time of their Imperiall Governement, how many were there, who by Militarie vertue, did rise from a meane Birth and condition to Supreame Honours, yea, to Sway the Imperiall Scepter? As Severus, Pertinax, Valerius, Aurelianus, Maximinus, & many other, whom ye shall finde in Historie. The Suyzers, a basse mechanicke Nation, of little account, beeing provocked by Charles of Burgundie, to take Armes against their will, like Oxen ignorant of their owne strength, hath euer since continued in that course, & hath gained such credite & reputation amongst Christian Princes, that the mightiest of them are glad to buy their friendshippe at a great price. Our Neighbours the States of the united Belgick Provinces, latelie were reputed, a dull, poore, lazie people, But by taking Armes, and maintaining the professours of Armes, they haue not only vindicate themselues from subiection to a mightie and powerfull Master, and gained Libertie, (which if it were not in our Age would seeme incredible) But haue come to such a height of wealth, and power, that they are extreamely redoubted by their Enemies, and respected by their Friendes. Hence it was, that our Heroicke King ROBERT the First of most famous memorie, left in His Testament, that our Scots should neuer make a long Peace with Englād: knowing well, that the Exercise of Armes was the onely meanes to maintaine our Credite, Honour, and Libertie, and that the desuetude thereof was the losse of all. Since then the benefite of the Arte Militarie is such, that the poore haue grown rich, the weake strong, the vile and abiect, valorous and of good Fame: Since it is the onelie meanes to Conserue the Honour and Libertie of a Nation, I hope there are no worthie and Generous mindes, but will apply themselues to Militarie exercise, and take Armes, if not for other ends, yet for defence of the Honour and Libertie of their Countrie, now when it is in danger: And I hope they will spend their Blood before they suffer this our Antient and Noble Kingdome, which hauing euer beene Externi immunis Domini, out-braues the rest of the Nations of the World, with Nunquam victa; now to be subiected, and to fall in the hands of any forraigne vsurper. A well gouerned Common-wealth in time

of Peace, will prepare for Warre, knowing the course of the world, to bee still subiect to change and alteration (resembling the ebbing and flowing of the Sea .)& c nstant in nothing but inconstancie; yea, a vvell Setled Minde in time of Prosperitie vvill prepare for Aduersitie, Metuens alteram sortem : *How much more ought vve, now, vvhen the Time of Peace is gone, and the Dayes of Warre come vpon vs, vvhen a feareſull Invasion is threatned by a mightie and powerfull Enemie; Now to rouse vp our Spirites, and prepare for Resistance: Shall vvee bee still slougishlie secure, and lye in a lavish sensleſnesse, without making any addresse for Defence: Where is the Antient Vigour of our Scottish Blood? Where are those, vvho not onely at Home, defended their Libertie against forraigne Hostilitie, limiting the proude* Roman *Triumphes at our Borders, & repressing the Furie of the* Goathes, Danes, & Vandals, *But also assisted their Friendes, and Allyes abroad? vvhere are those, vvithout vvhom,* Nulla unquam Francis Fulsit victoria castris? *Those (I say) vvho put Crownes vpon Kings their distressed Friends heades: Those (I say) vvho at the Conquest of* Italie, *vvere alwayes the first in acquiring, and last in surrandring, vvhen adverse Fortoune brought necessitie, (although that assistance bee now by them, ingratfullie buried in oblivion:) Where are all those Braue Spirits now in this Age? Now (I say) vvhen not our* Friends & Allyes *stand in neede of our helpe: But the Daughter of our King, the Sister of our Deare Sacred SOVERAIGNE, is in extreame distresse: The true and liuelie Image of his owne Goodnesse, & Gratiousnesse, A Princesse, although suppressed by Fortune, yet of Her selfe vvorthie, to whom the World should ascribe, and on whom the Heauens should bestow, the highest Degree of Glorie, and Felicitie, that Humane condition is capable of: Whose Worth no Lynes can expresse, nor Fame duelie report of, Beeing endued with all Royall Graces and Vertues, and cheifelie with an Invincible Fortitude of Minde, in the midst of Her Calamities, farre aboue the Condition of her Sexe: Shee is by the consent of all; The Flower of Princes, The Grace of Queenes, and The Queene of Graces, The Delight of the World, the Glorie of Her Sexe, yea, by confession of Her owne Enemies, The Iewell of* Europe; *A Princesse whose rare Vertues are so infinite and eminent, vvhose Maiesticall Cariage is so sweete and so Gratious, that I dare avouch, Neuer Eye did see Her, whose Heart did not admire and adore Her. And vvhen Her so many Princelie Children partake Her Calamities, But aboue the rest, That most*

Hopefull

Hopefull Prince Fredericke, *Her first Borne: A Plant, out of vvhich all Hervicke Vertues doe budde; Adornde vvith all Princelie Qualities, of a singular activitie in all exercises of bodie becoming His Highnesse, Of an Admirable Iudgement and Vnderstanding in all Noble Sciences, farre aboue His Age; Hee is of so rare Hopes, and such exquisite Perfections, that I cannot remember Him without Admiration: I wish my Penne were as able to expresse Their due praises, as my Sword shalbe reddie to Redresse their Wrongs: Can a true hearted Brittaine liue in Securitie, and thinke of the Distresses, of those Princes? Can a Minde anie wayes affected to Grace, & Vertue, not be commoued to see the very Temple of Vertue defaced? Can neither the duetie vvhich vvee owe to those afflicted Princes, nor the Safetie of our owne Countrie, moue vs to tak Armes? Shall vvee bee still slow in advancing the affaires of the Magnanimous and Invincible KING of* Denmarke: *a Prince, vvho for his Royall Courage, His Incomparable Valour, His Compleetnesse in all Martiall Vertues is to bee paralelled vvith the Greatest Kings and Princes, and Brautst Generalls that euer liued: who hath adventured His Life, His Crowne, His Posteritie, for our Quarrell, our Safety, and Restitution of these distressed Princes: who by His onelie power with-holdeth the Enemies Forces from falling vpon vs: Shall vve then be still insensible of our owne Danger, and of the Obligation which wee owe to this Most Valorous KING? Shall vvee contribute nothing to the furtherance of those levyes, vvhich our Most Sacred* SOVERAIGNE, *out of the Duetifull respect vvhich hee ought to Him, and the tender Loue which Hee caries to His Deare Sister, and the Earnest Care vvhich Hee hath of our safetie, hes granted vnto Him: O let it never bee said! and let the aversnesse of sundrie from this Service bee amended, that they may eschew the note of Disloyalty to their King and Countrie, and of ill affected mindes to these Princes: I cannot likewise, but remember with due Praises those two Worthie and Generous minded Noble-Men, vvho haue left their Ladies, their Children, their estate in this Countrie, and with extreame difficultie, and great charges, haue lifted their Regiments, and haue consecrated their Fortunes, Blood, and lifes, for the Service of their King, their Countrie, and those afflicted Princes, vnder the Banner of that Most Valorous CHRISTIAN Generall: and also all those Worthie Gentle-men, who haue accompanied them in this expedition, as vvell Officers, as priuate Souldiers: And likewise all*

other Noble-Men, Gentle-men, and well affected Subiects, who haue bent their whole power to further and advance those Levies: What praise is due vnto their merit? and with what Commendation ought they to bee extolled? Let their Fame liue for euer, and the Sinceritie of their mindes bee knowne to all those who are interressed in our Querrell. The example of those Braue Spirits (Noble and worthie Reader) I hope will allure You, either to follow them, that yee may bee partaker of their Honour, (for I assure You that our Countrie-men, both with that Magnanimous KING, and with all other Princes and States for their Militarie Valour are more respected, than other Nations:) or at least to Dedicate your selues to a daylie vnderstanding and exercise of Armes at home, that yee may bee able and readie to doe Service to your Countrie in time of Danger. I speake not to Base vnlgar mindes, whom I know, no perswasions, nor examples will allure to follow Honour, who beeing naturallie repugnant to all Grace and Vertue, and beeing vnprofitable burdens to the Earth, make themselues to bee esteemed vnworthie of life: But to You, whose Noble Mindes breathes after all Honourable and Vertoues Designes, who carie an vpright and vvell affected heart to your Countrie, who are alwayes readie to purchesse her Quietnesse by painefull Industrie, her Honour with effusion of Your Blood, her Safetie with lose of your lyfes: It is You, vvhom I exhort, It is You, vvhom I affectionatelie honour, and to whom I will ever approue my Selfe.

Your moſt duetifull
Servant,
T. K.

D. THOMAE KELLIE

Equiti Aurato, Libellum eruditum,

De Re Militari ædenti, Simul &

in Militiam, cum Mandato Sereniſſimi

Regis proficiſcenti.

SI bene de Patria meruitque & Cæſare, leges,
Qui Martis doctas rettulit in tabulas?
Pro REGE & Patria, atque aris, ſudore cruento
Pugnaſſe, extremus ſi ſit Honoris Apex?
Gloria quanta tua eſt, noſtram qui in prælia Gentem
Pectore Mavorti, & ducis & arte doces?

Aliud.

SCinditur in partes pro Marte, & Pallade mundus;
Palmam pro genio, dat fere quiſque ſuo:
Vincat uter, par erit Semper tua Laurea, ſive
Cedant arma togæ, ſeu Literæ, lituo.

R. Balcanquall.

PARAINETICON.

POore Rhene, *and canſt Thou ſee,*
Thy Natiues Gore Thy Chriſtall Curles deface;
Thy Nymphes *ſo bright which bee,*
Halfe-Blackamores embrace,
And (dull'd with Grapes) yet not reſente Thy Caſe?
Fallen are Thy Anadeames,
O of ſuch goodlie Cities Famous Flood;
Dimm'd bee Thy Beauties Beames,
And with Thy Spoyles, and Blood,
Hell is made rich, prowd the Iberian Brood.
And You faire Europes *Queene,*
Which haſt with Lillies deckt your purple Seate;
Can You ſee thoſe haue beene
Sterne Cometes to Your State,
On Neighboures Wracke to grow ſo hugelie great?
Looke how much Iber *gaines,*
By *as much leſſened is Your flowrie Throne;*
O doe not take ſuch paines
On Bartholomewes *alone,*
But ſeeke to reacquire your Pampelone.
Braue People, which endwell
The happieſt Ile that Neptunes *armes embrace,*
World, which doth yet excell
In what firſt Worlds did grace,
Doe neuer to baſe ſeruitude giue Place.
Marſhalle your Wits and Armes,
Your Courage whett with Pittie and Diſdaine;
Your deeme your Allies Harmes;
All loſe or reobtaine,
And either Palme *or fatall Cypreſſe gaine.*
To this Great Spirits *Frame*
If moulded were All Mindes, all Endeuoures,
Could Worth *thus All inflame,*
Then not this Ile were Ours
Alone, but all betweene Sunnes golden Bowres.

W. DRVMMOND. of Hathorn

TO THE RIGHT WORshipfull, His Deare Friend, *Sr. Thomas Kellie Knight.*

WHO reades these Tacticts *(Old new Arte of Warres)*
Muſt rauiſh'd reſt, although he knew no more,
But knowing Thee an Actor in theſe Iarres,
And Thine Adventures, muſt Thee more adore:
Eſſentiall life This to Thy Booke doth lend,
Whilſt that Thine Hand *performes, what* Wit *hath pend.*

Thou makeſt Pallas *truelie to confeſſe,*
A Corſlet, than a Gowne, now ſits Her better:
The Thracian God *his precepts doeth expreſſe*
In learned tearmes, and reſtes for this thy Debter,
And Themis *euer ſilent 'mongſt* Alarmes
Speakes lowde by Thee, *an* Advocat *in* Armes.

A Thouſand wayes Thou *doeſt diſplay* Thy *Worth,*
Honour'd of Mars, *ſtill honouring* Apollo:
Braue, learn'd, All where Thy Vertues *Beames burſt foorth,*
Belou'd of Kinges; O! who Thy Steppes can follow?
This Sympathie makes mee aboue all other,
Admire Thy Valour, loue Thee as a Brother.

Sr. G. Keith. *Knight.*

To the Right Worshipfull *Sr. Thomas Kellie*, Captaine, & Gentle-man of His MAIESTIES Privie Chamber.

EPIGRAM.

MArs *and* Minerva *both in one Conspire,*
To make the Worlde, *Thy high Attempts admire:*
Each day Thou'art seene, to trace the two-fold Way,
Which leades to Honours, *sweete Immortall* Bay:
For by Thy Vertue, *Thou hast raisd againe*
Thy blasted Stemme, which Envies breath had slaine,
You from the Ashes of Oblivion ryse,
And by Your Worth *and* Vertues *climes the Skyes:*
To King *and* Countrie, *Thine affection deare,*
Claimes on the Frame of Fame *the highest Spheare,*
Artes, Armes, *are onelie Thy proposed Aime,*
To make Thee gaine a Great and Glorious Name:
Since Thy Braue Minde *affects such Noble Things,*
Thy Praise yet more shall flow from Mouthes of Kings.

ANAGRAMS.

Sir Thomas Kellie { Lo, *Mars* is lik Thee, / or als like *Themis.*

NAmes, *oft agree with Fates, Thy Heav'n-bred Name,*
Lo, Mars is lik Thee, *doeth expresse the same,*
Or als like Themis; *These make All to know,*
The diverse Giftes Heau'ns doe on Thee bestow,
The Iustice and the Courage they Thee giue,
Shall make Thy Fame Eternallie to liue.

W. Forbes.

Philomathes.

OF THE ARTE MILITARIE.

Of Foote-men, and their Arming: *Of drawing of them into bodies.*

Tit. 1.

TAKTIKH, or the Arte Militarie is defined by the Emperour *Leo* to bee Επιστημη πολεμικων κινησεων, *A Science of warelike motions*, and thereafter (*b*) τεχνη στρατηγικη παρατοξεων και ὁπιλισμων και κινήσεων στρατιωτικων. *A Generals Arte of framing of Battels, and of Militarie motions and Armes.*

(a) *Leo Tacticor. cap.* 1 § 1.

(b) *Leo ibid.* § 2.

(*c*) *Ælian* the moste accurrate of Tacticke writters citeth the former out of *Æneas* his booke of Tactickes, which by the injurie of time hath perished.

(c) *Ælian Tact. cap.* 3.

The preparations for Warre, are of two sorts (saith the Emperour (*d*) *Leo* and (*e*) *Ælian*) Ἡ δε πεξικη των κατα γην μαχομενων, ἡ δε ναυτικη των κατα θαλασσαν: *The one are Land-forces, who fight vpon Land, the other navall forces, who fight vpon Sea.*

(d) *Leo. ibid.* § 7.

(e) *Æl. Tactic. cap.* 2.

The Levees for Land seruice, are two-fold, (*f*) το μεν εστι μαχιμον, το δε κατα τας τουτου χρειας συνερχομενον, αμαχον: *Some are that fight, some are that fightes not, but commeth for their use that fights*: as *Physicians*, *Clarkes*, *Merchantes*, *Chirurgians*, *VVomen*, and all those that follow the

(f) *Vterque, ibid.*

Campe, for the neceſſarie uſe of the Armie. Thoſe who fight are either (g) πεζικοὶ ἢ καβαλλαρικοὶ, *Foote men*, or *Horſe-men*. I will treate at this time of foote-men onelie: of their arming, ordering, and exerceaſing.

(g) *Vtere que. Ibid.*

The Foote-men then are either (h) ὁπλῖται or ψιλοὶ *armed*, or *naked*, that is, *heauie armed* or *light armed*: as for the πελτασταὶ I reckon them with the light armed.

(h) *Ælian. Ibidem.*

The ὁπλῖται had a compleat armour couering the bodie, called, κατάφρακτα and an ἀσπὶς or *Target* for defence: and a long σάρισσα or *Picke* of (i) 14. ſome of 16. cubits long, which is 21. or 24. foote, for offence. The light armed had for offenſiue armes onelie Arrowes, Dearties, and Slungs. The Roman heauie armed, called, *Scutati*, was of three ſortes, *Haſtati*, *Principes* & *Triarij*. The light armed, called, *Velites*, were *Sagittarii funditores* and *ferentarii*. How they were armed, ſee (k) *Vegetius* (l) and *Polybius*; for I will not burthing this ſhort Treatiſe with citations of antiquities, my purpoſe beeing to treate onelie of the Militarie diſcipline vſed in our dayes.

(i) *Ælian Tactic. c.* 14.

(k) *Veget de re militari lib.* 2. *cap* 15 & 16.

(l) *Polyb. Hiſt. lib.* 36. *Sect.* 8.

Yee ſhall therefore knowe that our Pickemen and our Muſquetiers ſerueth in place of the Greeke and Romane heauie armed, and light armed, our Picke-men reſembleth their heauie; our Muſquetiers their light armed, ſince thei nuention of Artillerie.

The

The Armes which our Picke-men are accuſtomed to carrie, are: a Head-peace, or Morion, a Gorget or Craige-peace, a Corſlet, or Cuirace with Taces; I haue ſeene ſome weare Puldrons or arme Pypes, and thoſe are defenſiue: his offenſiue armes, are a Sword, and Picke of *15.* foote long, ſhorter than the Grecian σαρισσα: The Armes of a Muſquetier offenſiue, are a Muſquet, the Barrell of the length of foure foote, the bore of 12 bullets to the pound: Bandelier with 12 charges at the leaſt, primer, bullet Bagge, and pruning yron, with a Reſt of a length proportionable to his ſtature, and a Sword. As for defenſiue Armes, hee hath none, although in ſome partes I haue ſeene them weare an Head-peace.

The φιλοι amongſt the Greekes, were ordered in bodies by themſelues, and had their own Officers, differing both in command and appellation from the Officers of the ὁπλιται of a Phalanx: for a Companie of ὁπλιται conſiſting of 16. files, and containing foure dilochies, was called, (m) σωταγμα, and the commander of it σωταγματαρχης: But a Companie of φιλοι, conſiſting of as manie files, was called, (n) ἑκατοντας, and the Leader of it, ἑκατοντάρχος, and had their owne Collours caried by their owne σημιοφορος, who was diſtinguſhed from the enſeignie of the σωταγμα, the deipth alſo was but halfe ſo much as the other. A Regiment of armed, containing 16. σωταγματα, was called a

(m) Æl. Tact. cap. 9

(n) Æliã. cap. 16.

led a φαλαγγιαρχια : and the Commander of it φαλαγγιαρχος : a Regiment of ψιλοι containing 16 εκατονταρχιας was called a ξεναγια, and the Commander ξεναγιαρχος: and so foorth, which all yee may see in (o) *Ælian*: The Roman *Velites*, sicke like were not comprehended vnder the maniples of the Legion, but were ordered by themselues, and had their owne Commanders.

(o) *Æl. Tactic. cap. 9. & cap. 16.*

In our moderne Discipline, wee differ from them both: for our Picke-men and our Musqueteirs concurre together, to make, vp one Companie, and one Regiment vnder the command of the selfe same Officers, and are alike ordered, and alike framed for seruice, and follow both of them one Collours.

All Souldiours thē both Picke-men & Musquetiers, according to our Discipline are collected into Companies, Companies into Regiments, Rigiments into one Armie, which are all vnder the command of a Generall (whose duetie the Emperour *Leo* sets downe through his whole Booke of *Tactickes*) Euerie Companie hath for Officers of the field: A *Captaine*, a *Lieuetenant*, an *Enseigne*, (whom the English corruptlie calleth *Antient*), two *Sergeants*, , three *Corporalls*, with their *Lanzprazados*: those resembleth the *Officers* of a Grecian συνταγμα, who were συνταγματαρχος, σημειοφορος, ουραγος, σαλπιγγης ὑπερετης στρατοκηρυξ, (p) as *Ælian* sheweth. Euerie Companie hath also two *Drums* a *Furrier* for lodging the Companie, (but in the Low-

(p) *Ælian. Tac. cap. 9.*

countries

countries the *Sergeant* diſchargeth this duetie. A *Prouooſt*, a *Clarke*, and *Chirurgian*. Companies are not alwayes of alike number: Some haue 100. ſome 200. ſome 300. men; ſicklike Regiments containeth not alwayes alike number of Companies; ſome haue 10. ſome 15. ſome 20. Companies; and in this wee differ from the Grecian σωματα and φαλαγγιαρχαι who did alwayes conſiſt of one equall number of Files. A Regiment hath for Officers of the Fielde, a *Colonell*, a *Lieuetenat Colonell*, a *Sergeant major*, and for Delinquents, a *Prouooſt marſhall* a Quarter-maſter for lodging the Regiment, a *prouiant Maſter* for prouiding of victuals, a *Chirurgian*. The *Spaniſh* Diſciplineadmits no *Lieuetenant Colonell* to a Regiment, nor *Lieuetenant* to a priuate Companie, but maketh the *Sergeant major* diſcharge the place of the one, & the *Alfiero* or *Enſeigne* the place of the other. The duetie of theſe Officers who haue not yet learned them by practiſe, may reade them in a Treatiſe publiſhed by the illuſtrious (*q*) Count *Mansfeilde*, or at the leaſt in his name: and in *Markhams* Epiſtles of war, and in ſindrie others, for I will onelie at this time inſiſt in the exerceaſing of a Foote Companie.

(q) *C. Mansf. in his directions of warre.*

A Companie is a Bodie of men compoſed of Files,

Tit. 2.

A File or String called by the Greekes λοχος is defined by (a) *Ælian* Αριθμος ανθρωπων απο του ἡγουμενου ἑως των μετ' αυτὸν ὀπισθιων τελευταιων μεχρι τε τελευταιου. *A number of men from one Leader, and his followers to the laſt man:* and againe, (b) συνταγμα ἐξ ἑπισατῶν κατ' αριτλω ὑπο λοχαγῳ τεταγμενων. *A row of followers placed after a Leader, euerie one according to his worth.* We define it commonlie to be. A Sequence of men ſtanding one behind another backe to bellie. (c) Count *Mansfeilde* calleth a File which conſiſt of 10. Souldiers armed alike, wherof euerie one knoweth his place; all of them ſtanding in a direct Line downe-ward, behind one another, and comprehended betweene the Leader and the bringer vp.

(a) *Ælian Tact. cap.* 4.

(b) *Ælian Tact. cap.* 5.

(c) *Mãſ. in his direct. of VVarre*

The File is the deipth or thicknes of the battel.

The number of a File is vncertaine, and variable according to the diuerſitie of *Diſcipline* of euerie Nation; and according to occaſions (d) *Ælian* ſayth, that the Files of the Grecian Phalanx were ſome times 8. ſome times 12. but moſt ordinarlie 16. deepe, yet ſome times of 50 deepe, as you maye ſee in (e) *Zenophon*, at the Battell of *Leuctra*, the *Thebans* were ordered 50 deepe: but *Cleombrotus* drew vp the *Lacedemonians* 12. deep (f) *Ageſilaus* bringing his Armie out of the ſtraite of *Mantinea*, ordered them in 9 deepe; but I thinke the Text bee corrupted: for all odde numbers are rejected by Tacticks, as vnfite for doubling.

(d) *Ælian Tact. cap.* 4.

(e) *Zenoph. hiſt. Grec. lib.* 6. 596.

(f) *Zenophon d. l.* 6. *num.* 605.

The

The Emperour (*g*) *Leo* giueth command to his Generall, to make the Files of the foote Battells 16. deepe, and the front according to the number of his men: But I finde in (*h*) *Vegetius* and (*i*) *Polybius*, that the Files of the Roman maniples consisted onelie of 10. men: the File was called, *Decuria* or *Contubernium*, the Leader of it *Decanus*, *Decurio*, or *Caput Contubernii*

The deipth of a File according to our moderne Discipline is 10. howsouer the Spanyards and the Italians maketh it incertaine: for the deipth of 10. is thought a sufficient thicknesse to receiue all charges.

Euerie man in his File is placed according to his worth and dignitie; The first man in dignitie is first in place, and is called by (*k*) *Leo* and (*l*) *Ælian* λοχαγος, προταστατὴς, the *Leader*, or *Forestander*: Hee hath commmandement ouer his File, & seeth that euerie one of them doe their duety both in March and Fight, and in exerceaſe, as he moueth and turneth, so must the rest of his File doe. The second man in dignitie is last in place, and is called (*m*) ουραγος διμεριτὴς *Bringer-up*, or *Reare-commander*. Hee hath command ouer the File next vnto the Leader, and seeth that those before him keepe a right Line. The third and fourth dignitie is in the 5. and 6. place, and they are called middle-men, the one middle-man to the Front, the other middle-man to the Reare. The fift, sixt, and seuenth Dignitie are in the 2. 9 & 4. places. The eight, ninth, and tenth

(g) *Leo Tactic. c.* 4. § 94.
(h) *Veget de re militari. lib.* 2. *cap.* 8.
(i) *Polyb. hist. lib.* 6 *Sect.* 9.
(k) *Leo Tac. cap.* 4. § 71.
(l) *Ælian. Tac. cap.* 5.
(m) *Leo and Ælian ibid.*

Dignitie in the 7. 3. and 8. places, as this Table sheweth.

Number of place.		Number of dignitie.
1. 0.	Leader	1.
2——		5.
3.——		6
4——		7.
5. 0.	Middleman	3. To the Front.
6. 0.	Middleman	4. To the Reare.
7.——		8.
8——		10.
9——		6.
10. 0.	Bringer-vp.	2.

Ioyning of Files, produceth Rankes, which is called, συλλοχισμος; for if ye jone 6. Files or 8. Files together, yee make 6. men, or 8. men in a Ranke, and the more Files ye joyne, the more ye extend the length of your Battell; for as the File measureth the deipth or thicknesse, so doth the Ranke the length of the Battell. Those who are in one File are called προταστατας and επιστατας, *Leaders* and *followers* Those of one Ranke, are called, παραστατας, or *Sidemen.*

Of Rāks.

A Ranke then is. A row of men standing one by another, in a right Line, shoulder to shoulder, or as *Ælian* describeth it, το κατα μηκος επ ευθειας ειναι οι παραστατας *When the side-men beareth straight foorth in length.* The length is called μηκος & it is the dimension of the Battell from the one

winge

winge or Flanke to the other. The deipth is called, βαθος and it is; the dimension of the Battell from the Front to the Reare.

The first Ranke is: A row of File Leaders, and is called, μετωπον φαλαγξ, *Frons, Acies. The Front.* The last Ranke is: A row of Bringers-vp, and is called, ουρα *Cauda* the *Reare.*

As men in their Files are placed according to their worth, so are the Files ranked in the Battell according to their dignitie: The first place of dignitie hath the File on the right hand, which is the right Flanke. The second place hath the File on the left hand which is the left Flanke, being the tenth (if there bee onelie 10. in Ranke.) The third and fourth dignitie, hath the 5. and 6. Files, which are in the midst of the Rankes. The fift, sixt, and seuenth dignitie, hath the 2. 9. and 4. Files. The eight, nynth, and tenth dignitie hath the 7. 3. and 8. Files.

	Number of place.	
Left Flanke.	10. 9. 8. 7. 6. 5. 4. 3. 2 1.	*Right Flanke.*
	0. 1. 1. 1. 0. 0. 1. 1. 1. 0.	
	2. 6. 10 8. 4 3. 7. 9. 5. 1.	
	Number of dignitie.	

Count Mansfeilde his discourse in this varieth from his Table.

Euerie man in the first Ranke is Leader of a File; euerie man in the first File is Leader of a Ranke.

C. Mans. in his Direct. of war. Pag. 31. & 32.

A	10.	9.	8.	7.	6.	5.	4.	3.	2.	1.	B
	P	P	P	P	P	P	P	P	P	P	1
	P	P	P	P	P	P	P	P	P	P	2
	P	P	P	P	P	P	P	P	P	P	3
	P	P	P	P	P	P	P	P	P	P	4
	P	P	P	P	P	P	P	P	P	P	5
	P	P	P	P	P	P	P	P	P	P	6
	P	P	P	P	P	P	P	P	P	P	7
	P	P	P	P	P	P	P	P	P	P	8
	P	P	P	P	P	P	P	P	P	P	9
C	P	P	P	P	P	P	P	P	P	P	10. D

This Figure, A, B, C, D, sheweth you the distinction and disposition of Rankes and files, A. B, is the Front. C. D. the Reare. B. D. the right Flanke. A, C, the left Flanke. The Lines A. B. and C D. with the others betweene them, are Rankes consisting euerie one of 10 men. The Lines B. D. and A C with the others betweene them, are Files consisting euerie one of 10. men also. The number of Files, is from B to A, which is the length of the Battell: The number of Ranks, from B. to D. which is the deipth of the Battell. From B to D. are *Leaders* and *Followers*, from B. to A. *Side-men*.

In placeing our best mẽ in the Frõt, of the Battel, & putting our braueſt Souldiers in the Auantgarde of the Armie, we follow the custome of the Grecians, who put alwayes their choiceſt Souldiers, in the Front of the Phalanx; contrare to the custome of the Romans, who placed the *Maniples* of their *Haſtati* Souldiers of leaſt experience in the Frõt of the *Legion*; their *principes* Souldiers of better worth in the middle; their *Triarii* the oldeſt Soul-

diers, and of greateſt vallour in the Reare, who were not to joyne with the Enemie, till the former had beene beatten or retired.

Of Diſtances.

Tit. 3.

SOuldiers being armed, and put in a Bodie, they muſt then know their diſtances, for all Ranks ought to bee parallel one to another, as alſo *Files*; and therefore, a Souldiers chiefe care, ſhould bee to haue an eye to his Leader & his Sideman, that hee may keepe an equall diſtance both in his Ranke and File; for: not keeping of diſtance, breedes confuſion, and oft-times is the cauſe of the ouerthrow of a Battell, and too much thronging together, maketh a Souldier vnable to uſe his Armes, too much ſtanding remoued, weakneth the Battell, and maketh way to the Enemie to breake it: as (a) *Vegetius* pertinentlie admoniſheth. *Nec ultra magis quam expedit aut conglobent agmen aut laxent; nam conſtipati perdunt ſpatia pugnandi & ſibi in vicē impedimento ſunt; & rariores atque interlucentes aditum perrumpendi hoſtibus præſtant.* Wherefore due diſtances are the midſt betwixt thoſe extremities.

(a) *Veget. de re. Militari. lib.* 1. *cap.* 26.

Diſtances than in our moderne Diſcipline by the opinion of the moſt learned Commāders are three, *Firſt*, *ſecond*, and *third* diſtance or *open Order*, *Order* and *cloſe Order*.

Open Order or *firſt Diſtance*, is when your men both in Ranke and File ſtand remoued ſixe foote

from another. This distance containes πηχεις δ. or 4. *cubits* in square; at this distance yee are to exercise your Companie.

Order or *second distance* is when they stand remoued 3. foote both in Ranke and File one from anothere: this distance is used, when ye embattell your Troupes, and lead them against the Enemie, or when yee come to stand, or meanes to wheale the Bodie. This distance is called of the *(b)* Greeks πυκνωσις, *Densatio*, and taketh vp 2. *cubites*, that is three foote, as the former did 4. *cubites*, for a *cubite* is a foote and an halfe: Obserue that when your Companie marcheth, they must keepe 3. foote betweene Files, and 6 foote betweene Rankes.

(b) *Ælian Tact. c.* 11.

Close Order or *third distance*, is when your Souldiers stand a foote and an halfe remoued from File to File, and 3. foote from Ranke to Ranke, and this distance is onely for Picke-men, when they charge, or receiue the charge of the Enemie: For the Musquetiers are neuer to bee closer, than three foote in square, because they must haue a free use of their Armes. (c) *Ælian* calleth this distance συνκαπισμος *Constipatio* or *a joyning of Targets together, and* taketh vp *a cubitt.* There is also a *double Distance*, or *open open Order*, which containeth 12. foote betwixt Rankes and Files; and is used when ye march toward a Forte, to let the shotte goe through the Files: and when ye double your Files by conuersiō.

(c) *Ælian Tact. c.* 11.

Now the measure of those Distances cannot be taken justlie by the eye; but the Souldier to learne them must acompt the distance of sixe foote to bee betwixt File and File, when the Souldiers streatching out their airmes, toucheth one anothers hands:

hands: and betwixt Rankes, when the endes of their Pickes come well neare to the heelles of them that march before: As for the Musquetiers, they must keepe levell with the Pickes: And the measure of the 3. foote betwixt the Files, is whē their Elbowes toucheth one another, betwixt Rankes, when they come vp to touch one anothers Swords; The measure of a foote and an halfe betwixt Files, is when they joyne shoulder to shoulder.

*M*anie Commanders holdes that *open Order* is not sixe foote in square, but is 12 foote in Ranke, and 6. in File; *Order* 6. foote in Ranke, and 3. in File: but I leaue euerie man to his owne opinion: For it is in Militarie Discipline, as in all others Sciences: *Certant doctores & adhuc sub judice lis est.* Alwayes the former opinion is most receiued.

What Distance and intervall the Romans used betwixt the *Maniples* and *Cohortes* of their *Legions* (d) see *Vegetius.*

(d) *Veget. de re Militari lib. 3. cap. 15.*

Of Marching.

Tit. 4

AFter that a confused Bodie of men is orderlie digested into Files and Rankes, and that euerie one of them knoweth their Distance; the next thing of consideration is how to make them March in due order.

All Marches are either in *Battell array* or by *diuisions.*

I will not here touch the Grecian Marches, ἐπαγωγη, παραγωγη, κολεμβολος, διαφαλαγγια, περιστομος, ὁμοιοστομος, ἑτεροστομος; the knowledge wherof I remitte the Reader to find

(a) *Ælian Tactic. cap. 35. & cap. 36. 37, 38. & sequent.*

in (*a*) *Ælians* Tactikes, but will onelie speake of the ordinarie Marches used now a-dayes.

Suppose then that yee haue a Companie of men consisting of 200. whereof the one halfe are Pickes, and the other Musquetiers: and yee would draw them vp in Battel. You must first know what should bee the length of your Battell, that is, How many men ye should put in Ranke, the deipth alreadie knowne 10. which is speedilie done thus: Diuide your whole number 200. by the deipth 10. the *quotus* beeing 20. sheweth you the length of your Battell, so that you haue 20 in Ranke, and therefore your Battell consisteth of 20. *F*iles; 10. deepe. Of those 20 *F*iles, 10. are Pickes, 10. Musquetiers: which you shall dispose after this manner. Set your 10 *F*iles of Pickes altogether: diuide your 10. *F*iles of Musquetiers, and draw them vp, fiue of them vpon the right hand of the Pickes, and the other fiue vpon the left hand of the pickes, all fronting equally, so that the Bodie of your Pickes shall bee flanked, with your Musquetiers vpon the right and left, as you see in the *F*igurs following, where P. signifieth the Pickemen, and M. the Musquetiers, for lacke of better figurs to expresse them.

A B C

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

m m m m m p p p p p p p p p p m m m m m 1.
m m m m m p p p p p p p p p p m m m m m 2.
m m m m m p p p p p p p p p p m m m m m 3.
m m m m m p p p p p p p p p p m m m m m 4.
m m m m m p p p p p p p p p p m m m m m 5.
m m m m m p p p p p p p p p p m m m m m 6.
m m m m m p p p p p p p p p p m m m m m 7.
m m m m m p p p p p p p p p p m m m m m 8.
m m m m m p p p p p p p p p p m m m m m 9.
m m m m m p p p p p p p p p p m m m m m 10.

D E F

Heere then yee ſee your 10. *F*iles or bodie of Pickes, are B. E. your fiue Files of Muſquetiers on the right *F*lanke of your pickes, C. F. the other 5. Files of Muſquetiers, on the left Flanke, A. D. frō C. to A. is the whole number of your Files as well Muſquetiers as Pickes; from C. to F. the number of your Rankes.

Now if yee would march by diuiſions as being forced by the ſtraitneſſe of the ground, yee are to command the Bodie to make an *halt*, or *ſtand*, then yee command the fiue *F*iles of Muſquetiers which are on the right Flanke of the Pickes, to march out from the Bodie, till their Bringers vp bee before the File-Leaders of the Pickes: And this ſhall bee your firſt diuiſion of Muſquetiers. Next yee are to command the fiue *F*iles of Pickes on the right hand, to march out from the reſt, and to follow the Muſquetiers Fileing euin with them but keeping a diſtance of 12 foote betwixt the diuiſions

(a) *Ælian Tactic. cap. 35. & cap. 36. 37, 38. & sequent.*

in (a) *Ælians* Tactikes, but will onelie speake of the ordinarie marches used now a-dayes.

Suppose then that yee haue a Companie of men consisting of 200. whereof the one halfe are Pickes, and the other musquetiers: and yee would draw them vp in Battel. You must first know what should bee the length of your Battell, that is, How many men ye should put in ranke, the deipth alreadie knowne 10. which is speedilie done thus: Diuide your whole number 200. by the deipth 10. the *quotus* beeing 20. sheweth you the length of your Battell, so that you haue 20 in ranke, and therefore your Battell consisteth of 20. *Files*; 10. deepe. Of those 20 *Files*, 10. are Pickes, 10. musquetiers: which you shall dispose after this manner. Set your 10 *Files* of Pickes altogether: diuide your 10. *Files* of musquetiers, and draw them vp, fiue of them vpon the right hand of the Pickes, and the other fiue vpon the left hand of the pickes, all fronting equally, so that the Bodie of your Pickes shall bee flanked, with your musquetiers vpon the right and left, as you see in the *Figurs* following, where P. signifieth the Pikemen, and M. the musquetiers, for lacke of better figurs to expresse them.

A B C

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

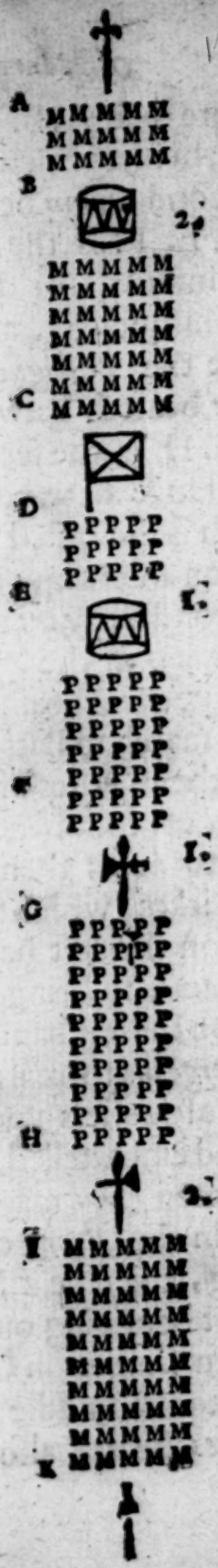
m m m m m p p p p p p p p p p m m m m m 1.
m m m m m p p p p p p p p p p m m m m m 2.
m m m m m p p p p p p p p p p m m m m m 3.
m m m m m p p p p p p p p p p m m m m m 4.
m m m m m p p p p p p p p p p m m m m m 5.
m m m m m p p p p p p p p p p m m m m m 6.
m m m m m p p p p p p p p p p m m m m m 7.
m m m m m p p p p p p p p p p m m m m m 8.
m m m m m p p p p p p p p p p m m m m m 9.
m m m m m p p p p p p p p p p m m m m m 10.

D E F

Heere then yee ſee your *10. F*iles or bodie of *P*ickes, are B. E. your fiue Files of Muſquetiers on the right *F*lanke of your pickes, C. F. the other 5. Files of Muſquetiers, on the left Flanke, A. D. frõ C. to A. is the whole number of your Files as well Muſquetiers as Pickes; from C. to F. the number of your Rankes.

Now if yee would march by diuiſions as being forced by the ſtraitneſſe of the ground, yee are to command the Bodie to make an *halt*, or *ſtand*, then yee command the fiue *F*iles of Muſquetiers which are on the right Flanke of the Pickes, to march out from the Bodie, till their Bringers vp bee before the File-Leaders of the Pickes: And this ſhall bee your firſt diuiſion of Muſquetiers. Next yee are to command the fiue *F*iles of Pickes on the right hand, to march out from the reſt, and to follow the Muſquetiers Fileing euin with them but keeping a diſtance of 12 foote betwixt the diuiſions

where the *Enseigne* must march, and this shall bee your first diuision of Pickes; After them shall follow the rest of the Pickes, which shall bee your second diuision of Pickes, keeping also a distance as the former. Last of all shall follow the 5. *Files* of Musquetiers, which was on the left Flancke of the Pickes, and this shall bee your second diuision of Musquetiers. The Officers of the Companie must bee thus placed: The *Captaine* marcheth in the Front before the first diuision of Musquetiers; The *Enseigne* with the Colours is to march before the first diuision of pickes: The oldest *Sergeant* is to leade the second diuision of pickes. The second *Sergeant* leads the second diuision of Musquetiers. The *Leiuetenant* marcheth after the second diuisiõ of Musquetiers, & bringeth vp the Reare. The chiefest *Drumme* beats in the first diuision of Pickes, betwixt the 3. and 4. Ranke; The second *Drumme* beats in the first diuision of Musquetiers, betwixt the 3. and 4, Ranke: but some by the contrare, maketh the chiefest *Drumme* to beate in the first diuision of Musqueties, because (say they) the *Captaine* ought to haue the chiefe *Drum* with him: Some also I haue seene make the *Drum* who marcheth with the Pickes, to beate in the Front beside the *Enseigne*, but those differences are not of great moment; if the Companie haue a third *Drum*, he shall beate in the last diuision of Musquetiers: The figure following expresseth this march clearlie.


A
B
2.
C
D
E
1.
F
1.
G
H
2.
I
K

In this figure then. A. B. C. is the firſt diuiſion of Muſquetiers, before which the *Captaine* marcheth. In D. the ſecond *Drum* beates betwixt the 3. and 4. Ranke. D. E. F. is the firſt diuiſion of Picks. C. D. is the interuall, or diſtance betwixt the firſt diuiſion of Muſquetiers, and the firſt diuiſion of Pickes where the *Enſeigne* marcheth. In E. the firſt *Drumme* beateth betwixt the 3. and 4. Ranke of Pickes. G. H. is the ſecond diuiſion of Pickes. F. G. the diſtance betwixt the two diuiſions of Pickes, which is the oldeſt *Sergeants* place. I. K. is the laſt diuiſion of Muſquetiers. H. I. the interuall where the ſecond *Sergeant* marcheth. K. is the place of the *Leiuetenant* in the *Reare.*

Now when ye come againe to a faire Campaigne & deſireth to march in Battell, to be the more ready to withſtand the aſſaultes of the Enemie. The *Captaine* in the Front, commandeth the firſt diuiſion of Muſquetiers to *halt*; then commandeth the firſt diuiſion of Pickes, which the *Enſeigne* leadeth to march vp vpon the left hand of them; thereafter the firſt *Sergeant*, to bring vp the ſecond diuiſion of Pickes vpon the left hand of the former; Laſtly the ſecond *Sergeant* to march vp with the ſecond diuiſion of *Muſquetiers* vpon the left hand of all; & ſo they ſtand embattelled, as they were at the firſt.

Obſerue when they march in Battell, the *Enſeigne* goeth in the *Front* of the Pickes with his *Colours* fleeing, chiefelie if hee bee in ſight of the Enemie, or yet bee going out, or comming into his Quarter, or entring vpon Guarde, but in fight, he is to retire into the middle Ranke of the pickes: The *Drummes* beates alſo in the *Front*, but in

fight,

fight, they muſt draw aſide to the *angles* on the *Flankes*: The chiefe *Drumme* is to attend the *Captaine*, to deliuer his Commands by touke of *Drum* to the Souldiers when the voyce cannot bee heard. The *Sergeants* marcheth in the Flankes, the oldeſt in the right, the other in the left: hauing care that euerie man march orderlie, and keepe his diſtance, and that no man goe out of his Ranke. The *Lieuetenant* remaines in the *Reare*, bringing vp the Companie, and ſeeing that no man fall backe, but that euerie man doe his duetie.

That which I haue ſhown of a ſingle Company, may bee vnderſtood of a diuiſion of a Regiment, a *brigada*, or any greater Body: but thē the diuiſions both of Pickes and Muſquetiers, muſt bee framed according to the number of your Bodie, and the Officers are placed according to the *Sergeant major* his Direction.

Obſerue, that when yee march by diuiſions & commeth to a narrow Straite, where onelie one or two can goe in *Front* as ouer a little *Planke* or the ſtraite of a *Ditch*: Yee muſt make them march away by *Files* leading out one *File* after another, or by *Rankes*, commanding *Rankes* to ranke 1. or 2. or 3. according to the capacitie of the Straite: and that either to the right or left hand, as the Straite ſhall ly vpon the right or lef *Flanke* of your diuiſion: If vpō the right; then the right hand man marcheth fordward with his ſideman, if the place ſuffer 2. and the nixt 2. ſidemen of that *Ranke* followeth: And ſo the reſt of the *Rankes*, till all the diuiſions bee paſt

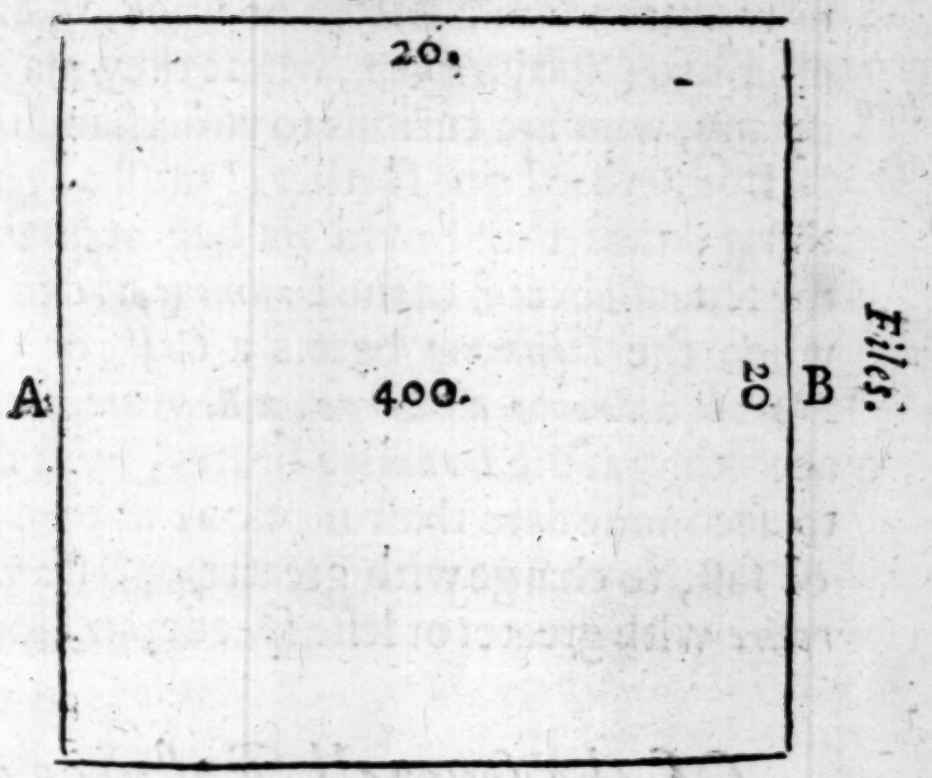
ouer: which being done, he is to command *Ranks. Ranke as yee were*: And ſo they returne all to their firſt *Station* and *Poſture.*

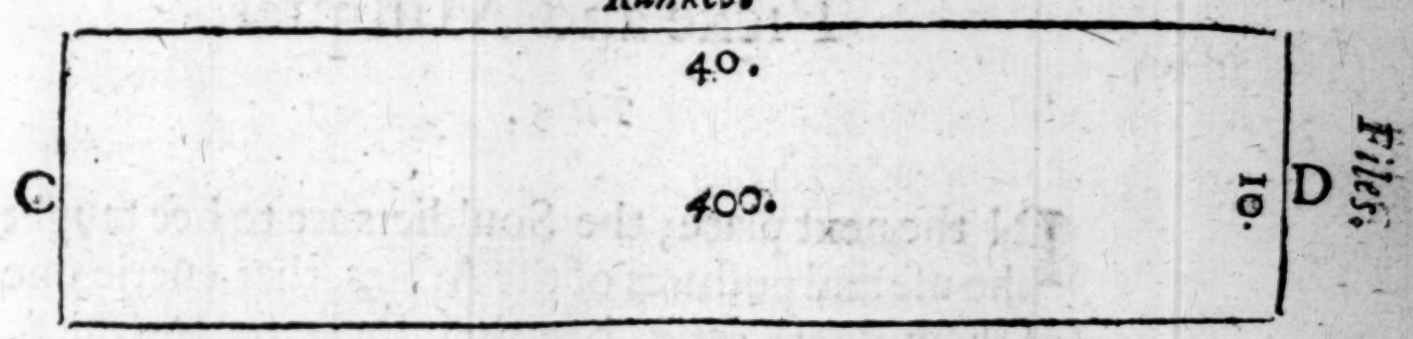
Obſerue alſo, that if yee bee to draw vp your men in a *Battallion Quarre*, or *Square Battell* (I meane of men, not of ground) that is a *ſquare Quadrate*, which is a (*b*) figure *Equilaterall* and *Rectangulare*; whoſe *Rankes* and *Files* ſhall be of equall number: It is quicklie and exactlie done by extracting the *radix quadrata*, or the *Square roote* of the number of your men, which will bee both the length and deipth of your *Battell*: As for example, ye haue 400. men to put in a *ſquare Battell*, yee ſeeke out the ſquare-roote of 400. which yee finde to bee 20. And therefore in an inſtant you draw vp your men 20. in *File*, and 20. in *Ranke*. But if yee bee to make vp any other *ſquare Battell Quadrilaterall*, which is (*c*) *Figura altera parte longior*, called by the French *Battallion Quarre en lõgue*, ye haue nothing to doe, but to diuide the number of your men by the deipth giuen: and the *quotus* ſhall bee the length of your *Front*, which I ſhew before, as in this inſtance diuide 400. by the deipth of 10, the *quotus* 40. ſhall giue you 40. in *Ranke*, and ſiclike of any greater number, the figure following A. B. ſheweth the firſt. C. D. the ſecond.

(*b*) *Eucl. lib. 1. in defin.*

(*c*) *Euel. lib. 1. in def.*

Obſerue





Obſerue by the way, that with a contrarie operation, ye may at the firſt ſight, find the number of a *Battallion*, paſſing by it, and counting the length & the deipth therof, & multiplying the one by the other as in the former inſtance, multiplie 40. in *Ranke*, by 10 in *File*, ye ſhall find the whole number to be 400.

I will not here ſpeake of the other Battels, which are not ſquare, as of *Round*, *Demilunar*, *concave* or *convexe*, *Rombus* or *Diamond*, *Triangle* or *Vedge*, which is halfe a *Diamond*; and ſuch like others; becauſe they are not fitte for march, neither are they

now much uſed in Battell or fight, as alſo they are diſcribed (*d*) by *Ælian*, where they may bee found by any, who are curious to vnderſtand them.

(d) *Ælian Tact. cap.* 46. 47.

But before I goe further, I muſt advertiſe of one thing, that the Souldiers bee acquainted with the ſeuerall beates of the *Drumme*, and to vnderſtand when the *Drumme* beates a *Call*, or *Gathering*; a *March*, a *Troope*, *a Charge*, a *Retreate*, a *Releiſe*; and according as the *Drumme* beates, ſwift or ſlow, ſo to accommodate thair motion: as to march ſlowe or faſt, to charge with greater or leſſe violence, to *retire* with greater or leſſe ſpeede, and ſo foorth.

Of the ſeuerall Poſtures of the Picke and Muſquet.

Tit 5.

IN the next place, the Souldiers are to bee taught the uſe and poſtures of the Armes, that euerie one of them doeth carie, bee they Picke or *Muſquet*, and to handle them gracefullie.

The Poſtures then, which the Picke-men ſhould uſe, either ſtanding or marching, are theſe following: In the columne vpon the right hand, are contained the tearmes of command in our *Scots* Language: on the left the *Engliſh*: for I thought good to acquaint you with both, ſeeing ſometimes the wordes are different.

Take

1. *Take vp your Picke.*
2. *Shoulder your Picke.*
3. *Slope your picke.*
4. *Levell your picke.*
5. *Order your picke.*
6. *Aduance your picke.*
7. *Traill your picke.*
8. *Cheeke your picke.*
9. *Recouer your picke from traill or cheeke by palming.*
10. *Port your picke.*
11. *Charge your picke.*
12. *Charge to the right hand.*
13. *Charge to the left.*
14. *Charge to the Reare by the right or left.*
15. *Charge at the foote againſt horſe and draw your Sword.*
16. *Lay downe your picke.*

1. *Lift your picke.*
2. *Shoulder your picke.*
3. *Sclant-carie your picke.*
4. *Plate-carie your picke.*
5. *Ouer end, or ſet down your pick.*
6. *Mount your picke.*
7. *Traill your picke.*
8. *By the point hold your picke.*
9. *Recouer your pick by palming.*
10. *Porte your picke.*
11. *Preſent your picke fordward.*
12. *To the right hand, or right about preſent your picke.*
13. *To the left hand, or left about preſent your picke.*
14. *To the Reare, or to the left roud about preſet your picke.*
15. *Foote your picke, and draw your Swords.*
16. *Lay downe your picke.*

Obſerue that thoſe three Poſtures, *Take vp your Picke, Order your Picke, Lay downe your Picke*, are to bee done onelie ſtanding: The reſt ſtanding or marching: but yee muſt remarke that when your Souldiers *charge*, ſtanding to make them fall backe with the right Legge, and marching to ſet fordward the left: Alſo they muſt know to *charge to the right, to the left, to the Reare*, from beeing *aduanced, ordered* or *ſhouldered*, all alike readie, and with alike promptitude: For howſoeuer the Enemie appeare, they muſt bee readie to charge from euerie Poſture they ſtand in.

The *Charging* to the R*eare* by the *left*, is the moſt

eaſie and moſt commodious motion: For the charging by the *right* (although it bee much uſed by the *French*, whē they commād, *La charge* be *a demy-tour a droit*) is verie troubleſome and dangerous, & is diſcharged by the *Law Countrie* Diſciſpline, for they beeing at *cloſe order*, (which is the diſtance, wherein they *Charge*, or receiue a *Charge*) and *turning to the right hand*, their Swordes doe chap and are entangled vpon their *Side-men*, ſo that they annoy their *Side-men*, and themſelues are hindered to turne, and therefore breedes a great embarras and confuſion in the Battell.

This Poſture, *Aduance* or *Mount your Picke*, (which the *French* calleth, *Pique en haut*, the *Greekes* ανω τα δορατα) is to bee uſed in a *Troope*, and in exerciſing their motions.

In a march they muſt alwayes haue their Pickes *Shoulder ed*, either *Leuell* or *Sloppe*, as the word ſhalbe giuen: When they come through a gatē or porte, they muſt *porte their pickes*, that is, carie them as as they were halfe charged: Vpon an *halt* or *ſtand*, they muſt *order their Pickes*, vnleſſe there bee command to the contraire.

When the whole Battell *chargeth* one way, the firſt 5. *Rankes* muſt onelie *charge*, the way commanded, and the other 5. (if they bee 10. deipth) muſt onlie *port their pickes*, & carie them ſo ouer the heads of the *Leaders*, that they no wayes empeſh them, either in *charging* or *retiring*: When they lift their Pickes from their ſhoulders *to charge*, let them take heede to lift them in a right Line and paralell with their owne *File*: for otherwiſe by inclining of thē to either hand, they ſhall trouble their next *Files*.

When

When Battelles commeth to puſh of picke, good Commanders ſayeth, that your picke-men muſt not puſh by aduanceing and retireing their Arme as commonlie is done; but onelie goe joyntlie on together in a Rout without moueing their Armes.

The *charge* at the foote againſt horſe, is not now uſed in the *Low-Countries*, but they *charge* ouer hand aloft: becauſe (ſay they) they haue the picke more at command to turne where they will.

The Poſturs of the *Muſquetier* are thoſe following, our *Scots* in the right-hand columme, the *Engliſh* in the left.

1. *Take vp your Muſquet, and your Reſt.*
2. *Recouer your Muſquet, & joyne your reſt to your Muſq.*
3. *Draw out your match.*
4. *Blow your match.*
5. *Cocke your match.*
6. *Try your match.*
7. *Guarde your pan.*
8. *Priſet by blowing your match and opening your pan.*
9. *Giue fire.*
10. *Diſmount your Muſquet, & carie it with your reſt.*
11. *Vncocke your match.*
12. *Returne your match.*
13. *Blow your pan.*
14. *Prime your pan.*
15. *Shoote your pan.*

1. *Take vp your Muſqut, and your ſtaffe.*
2. *Recouer your Muſquet, and joyne your ſtaffe to your Muſ.*
3. *Take out your lunt.*
4. *Blow your Lunt.*
5. *Cocke your lunt.*
6. *Try your lunt.*
7. *Guarde your pan.*
8. *Preſent or lay on by blowing your lunt, & opening your pan.*
9. *Giue fire.*
10. *Take downe your Muſquet, and carie it with your ſtaffe.*
11. *Vncocke your lunt.*
12. *Put your lunt betweene your fingers.*
13. *Blow your pan.*
14. *Morſe your pan.*
15. *Shoote your pan.*

16. Caſt off your lowſe powlder.
17 Blow your pan.
18. Caſt about your Muſquet and traill your reſt.
19. Charge your Muſquet.
20. Draw foorth your ſcourer.
21. Shorten your ſcourer.
22. Charge with bullet and ram downe your poulder & bullet.
23 Draw foorth your ſcourer.
24 Shorten your ſcourer.
25. Returne your ſtourer.
26. Bring about your Muſquet, and paiſe it, and recouer your reſt.
27. Shoulder your Muſquet, and carie your reſt with it.
28. March, and carie your reſt in your right hand.
29. Slip your Muſquet, and vnſhoulder your Muſquet.
30. Reſt your Muſquet.
31. Stãd to your Sẽtinell Poſture.
32. To your ſaluting Poſture.
33. Lay downe your Muſquet.

16. Caſt off your louſe powlder.
17 Blow your pan lidde.
18. Caſt about your Muſqnet, and traill your ſtaffe.
19. Charge your Muſquet.
20. Draw out your Ram ſticke.
21. Shorten your Ram-ſticke.
22 Put in your Bullet, and ram downe your powlder & Bullet.
23. Draw out your Ram-ſticke.
24. Shorten your Ram ſticke.
25. Put vp your Ram-ſticke.
26. Fetch your Muſquet forward with the left hand, and hold it vp in the right, and recouer the ſtaffe.
27. Shoulder your Muſquet, and carie your ſtaffe with it.
28. March, and carie your ſtaffe in your right hand.
29. Sinke your Muſquet, and vnſhoulder your Muſquet.
30. Lay your Muſq. on your ſtaffe.
31. Stãd to your Sẽtinell poſture.
32. Hold your Muſquet in your ſtaffe with the left hand, onelie in ballance.
33. Lay downe your Muſquet.

Obſerue that all this multitude of Poſtures in ſeruice, are redacted to three, *Make readie. preſent*, and *giue fire.*

The Muſquetier vpon a March is alwayes to haue his

his Muſquet ſhouldered, and the Reſt in his right hand, his left vpon the Butte-end or head of the *Muſquet*: Although I haue ſeene many Souldiers and chiefelie the lazie *Dutches*, to carie their Muſquet with their hand vpon the Barrell, and the mouth before them, which is an vnſeemelie Poſture, and verie vnreadie for ſeruice.

Vpon one *halt* or *ſtand* the Muſquetier is alwayes to *reſt his Muſquet*, vnleſſe hee haue command to the contrarie.

The Muſquetiers are to carie the mouth of their Muſquet high, as well when they are *ſhouldered*, as when they *prime* or *guarde their pan*, or come vp to *giue fire*: And when they *blow their Match*, they are to bring their Muſquet to their mouth, and not to ſtoope to it.

A Muſquetier in making *readie*, and in *falling away* through an diuiſion, or by *counter-march*, muſt take good heede to carie his *Muſquet* in a evin ſtraight line with his File, for if he carie it croſſe, hee will diſturbe his neighbour *Files*.

When they *giue fire* againſt the Enemie, beeing in open Fielde, they muſt aime no higher, than the Girdle of a man: But within a *Trench* or *Parapet*; where perchance nothing ſhall bee diſcouered, but the heade of the Enemie, they muſt aime at that part which appeareth.

How thoſe Poſtures, as well of the *Picke* as *Muſquet*, are to bee performed, may bee ſome-what vnderſtood by the figures which are ſet downe in his Excellence *Graue Maurice*, his *Booke* of poſtures, but they are neuer to bee learned without action and practiſe.

Of Motions, and first of Faceing.

Tit. 6.

SOuldiers then beeing Armed, and drawen vp in an orderlie Bodie, and knowing their distances, marches & Postures: The chiefe thing thereafter that they are to learne, is their *Motions*, which are the life of an Armie, for as the Soule is to the bodie, so is *Motions* to a Battell: and it is assured that a few number of men well disciplined, and beeing perfect in their Militarie *Motions*, are able to rencounter and ouerthrow great multitudes without practise of Armes ευρισκοιεν πολλακις a (sayeth *Ælian*) μεγαλας δυναμεις συντετρυμενας δια την αταξιαν ὑπ' ὀλιγων συντεταγμενων, *Wee finde often great Forces to bee by their disorder ouercome by a few well ordered and exercised*, and therefore; the chiefe thing that Souldiers are to vnderstand, is their Militarie *Motions*, for *the Science of thir Motions*, is the definition of the Arte Militarie: These then, I shall sette downe in some fewe Titles with as great varietie and perspicuitie as I can, touching onelie the auncient exercise in so farre as it is a ground, or doeth agree with our moderne Discipline.

(a) *Ælian Tact. cap.* 3.

The *Motions* of *Troupes* are two folde: of the whole, or of a parte: of the whole, either in keeping ground, or changing ground: Keeping ground when euerie person moueth in his proper place, as in *Faceing*: Changeing ground, when the Battaillon changeth the ground it stood in, as in *counter-*

ter-march and *wheeleing*: The *Motion* of a parte, is when a part of the Battell moueth, and a parte standeth still, as in *doublinges, closinges, openings*, for in those *Motions*, some Rankes or *Files* standeth, & the rest moueth: I will then begin with *Faceing*.

Faceing is: a *Motion* transferring the Souldiers face to the *Flanke* or the Reare of the Battell: And therefore is of two sortes, the one, when the Souldier maketh a Quarter turne to the *right* or the *left hand*, the other when hee maketh an halfe turne: The first *Motion* the Greekes called κλισις, which is defined by (b) *Ælian*, ἡ κινησις ἡ ὅτι δορυ ἐπιστρεψαντος τοῦ ὁπλιτοῦ ἢ ἐπ' ἀσπίδα, *a Motion of the Souldier, turning his face to the Picke or the Target*, that is to the *right*, or the *left hand*, For the *Grecians* (as I told you before) caried a Picke in their right hand, and a Target in the left, but I wonder why *Ælian* calleth it a *Motion* of the Armed Souldier onelie τοῦ ὁπλιτοῦ seeing the ψιλοι did also use this *Motion*.

(b) *Ælian Tact. c.* 24.

How to performe the Motiō.

The action of this *Motion* is thus performed, the Souldier standeth firme with his left Legge, and turning onelie vpon his heele, draweth backe the right Legge, if hee face to the *right hand*, or bringeth foreward the right Legge if hee face to the *left hand* & this is to bee done in a *stand*, but in a *March*, faceing to the right hand, they must bring foreward their left Legge.

The use of the Motiō.

The use of this *Motion*, at a *stand* is to be ready at an instant to receiue the charge of the Enemie, if they assaile either of your *Flankes*: But if ye face and *march*, yee may thereby preuent the Enemie from falling vpon your winges *c* (as *Leo* showeth) by bringing your Battell to some Riuer or other

(c) *Leo Tact. c.* 7. §§ 79.

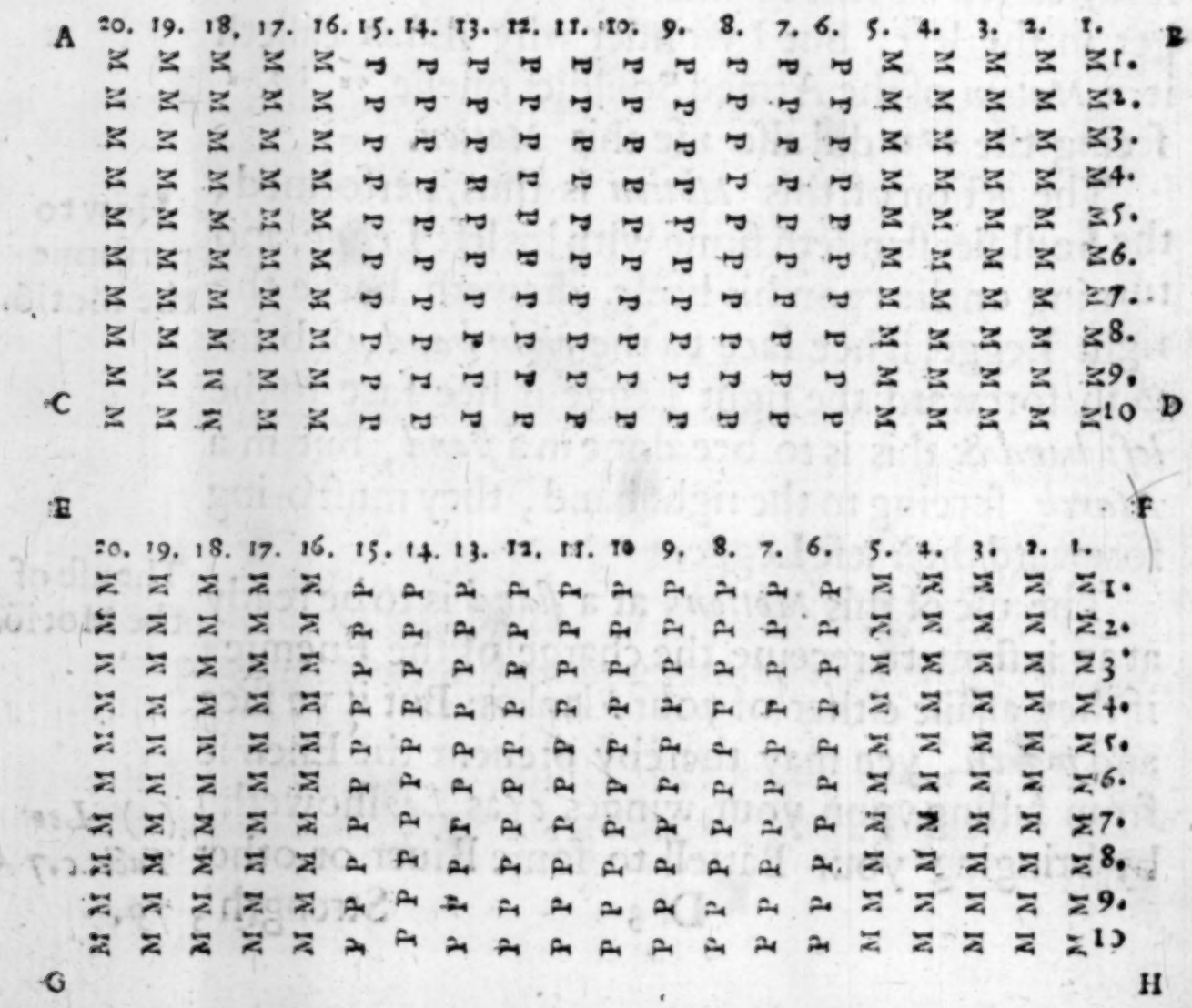
Strength, and alſo to eſchew ſome dangerous ground: as *Alexander* did at *Arbela*, who perceiuing that *Darius* had ſtrowed the ground betweene the two Battels with τριβολοι or *Calthropes*, faced his right winge to the right hand: and marched about: (*d*) See *Polienus*.

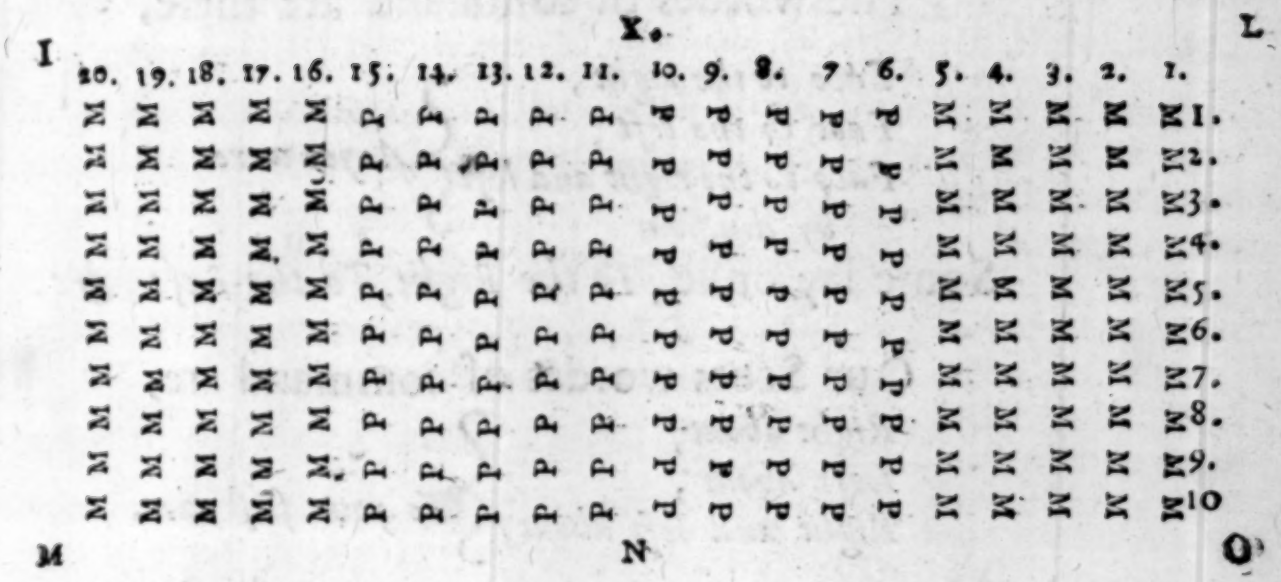
(d) *Polienus Stratag lib. 4. in Alexandro § 17.*

But if the Enemie charge both your Flankes at one time, yee muſt face the halfe of your Battell to the right hand, the other halfe to the left, that is: the halfe of your Files which are vpon the right Flanke, faces to the right hand, the other halfe which are vpon the left Flanke, faces to the left hand: and this is the φαλαγξ αμφισομος described by (*e*) *Ælian*, and not αντισομος as Captaine (*f*) *Bingame*, ſayeth. The formes of κλασις yee ſhall ſee in the figures following.

(e) *Ælian Tact. c. 38.*

(f) *In his Notes vpon Æl. Tact. cap. 25.*





The figure A. B. C. D. is a faceing of the whole Battell to the right: where that which was before the right Flanke. B. D. is now become the Front: the Reare before C. D. is now become the right Fläke: the Front before A. B. is now become the left Flanke: the left Flanke before A. C. is now become the Reare: The figure E. F. G. H. is a faceing of the Battel to the left, where that which was the left Fläk before E. G. is now become the Front: The right *F*lanke F. H the Reare: The Front E. F. the right Flanke: The Reare G. H. the left *F*lanke. The figure I. K. L. M. N. O. is a faceing of the Battell to the right and left by diuision, where the one halfe of the Battell K. L. N O. consisting of 5. Files of Pickes. and 5. of Musquetiers, faces to the right hand, and maketh the Front. L O: which before was the right Flanke, & the other halfe, I. K. M. N. consisting of alike Files, faces to the left, and maketh the Front. I. M. which before was the left Flanke, so that thereby it is διπρόσωπος, or a double fronted Battell.

The wordes of command are theſe,

Face to the right,
Face to the left,
Face to the right and left by diuiſion. } *As yee were.*

Some ſay onlie, *To the Right, To the Left, &c.*

Our Scots wordes of command are,

Right about,
Left about,
Right and left about, } *To your firſt oder.*

But they are not ſo proper as the former.

The ſecond manner of faceing is when the Souldiers maketh an halfe turne to the Reare, by the *right* or *left hand*: The French calleth it *Demy tour a droit* or a *Gauch*. The Greekes calleth it μεταβολη, which was either ἐπι δεξια or ἐπ' ἀριστερα (g) *Leo* calleth it μεταφερειν εις τα δεξια ἢ αριστερα. *Ælian* (h) defineth it to be *Tranſlation of the former aſpect to the Reare.*

(g) *Leo Tact. cap. 7. § 79. & 84*

(h) *Ælian. Tact. c. 24.*

How to doe the Motion.

The Motion is done as the other, except that the Souldier maketh twiſe ſo great a Turne, for ſtanding faſt with his left Leg, he onelie turneth vpon his heele, and draweth backe his right Legge if hee face to the right about, and bringeth foreward his right Legge, if hee face to the left about, but in a *March* faceing to the right about, hee muſt bring foreward his left Legge.

The uſe of the Motion.

The uſe of it is, if the Enemie charge your Reare, then yee are readie to receiue him by turning the faces of all the Souldiers of your Battell to the Reare againſt him, which (i) *Pyrrhus* King of *Epirus* did comming out of *Argos* beeing preſ-

(i) *Plutar. in Pyrro.*

ſed

sed with a multitude of Enemies; and (k) *Cyrus* comming from the walls of *Babylon* to his *Campe*, often faced about his Armie to receiue the Enemie, who saliing out of the *Towne*, did charge his *Reare*: But if your Enemie charge both *Front* and *Reare*, thē yee must *face* about the halfe of your Battell, that is, if yee bee 10. deepe, ye *face* about the halfe *Files* or *middle-men* with *their followers*, (which are the last fiue Rankes) to the *Reare*, so ye shall be able to receiue his charge both in *Front* and *Reare*: The (l) Greekes called this Φαλαγξ αμφισομος, and not αμφισομος as Captaine *Bingam* would haue it: The figures following will manifest them.

(k) *Zenoph. Cyroped. lib. 7. 189.*

(l) *Ælian. Tact. c. 38.*

P Q

20. 19. 18. 17. 16. 15. 14. 13. 12. 11. 10 9. 8. 7. 6. 5. 4. 3. 2. 1.

W W W W W W P P P P P P P P P W W W W W W 1.
W W W W W W P P P P P P P P P W W W W W W 2.
W W W W W W P P P P P P P P P W W W W W W 3.
W W W W W W P P P P P P P P P W W W W W W 4.
W W W W W W P P P P P P P P P W W W W W W 5.
W W W W W W P P P P P P P P P W W W W W W 6.
W W W W W W P P P P P P P P P W W W W W W 7.
W W W W W W P P P P P P P P P W W W W W W 8.
W W W W W W P P P P P P P P P W W W W W W 9.
W W W W W W P P P P P P P P P W W W W W W 10

R S

E T

T. V.

20. 19. 18. 17. 16. 15. 14. 13. 12. 11. 10. 9. 8. 7. 6. 5. 4. 3. 2. 1.

M M M M M P P P P P P P P P P M M M M M 1.
M M M M M P P P P P P P P P P M M M M M 2.
M M M M M P P P P P P P P P P M M M M M 3.
M M M M M P P P P P P P P P P M M M M M 4.
M M M M M P P P P P P P P P P M M M M M 5.
M M M M M d d d d d d d d d d M M M M M 6.
M M M M M d d d d d d d d d d M M M M M 7.
M M M M M d d d d d d d d d d M M M M M 8.
M M M M M d d d d d d d d d d M M M M M 9.
M M M M M d d d d d d d d d d M M M M M 10.

X. Y.

The figure P. Q. R. S. is a *facing* of the whole Battell to the *Reare* by the *right* or the *left*, where R. S which before was the *Reare*, is now become the *Front*: and the *Front* before P. Q. now the *Reare*: the right *Flanke* Q. S. now the left: The left P. R. now the right. The figure T. V. X. Y. is a *facing* onelie of the halfe *Files*, or last fiue Rankes to the *Reare*, so that yee see the one halfe of your Battell, both Pickes and Musquetiers *faceing* towards the *Front*, T. V. and the other halfe *faceing* towards the *Reare*, X. Y. which is now also become a *Front*, so that it is likewise ἀντίστροφον, or a double Fronted Battell.

The wordes of Command are those,

Face to the right about,
Face to the left about,
Halfe Files face to the right or left about.
} *As yee were.*

Some say onelie, *To the right about, to the left about*, &c.

Count

Count (m) *Mansfield* his wordes of Command, are: *By the right hand to the Reare: By the left hand to the Reare*: which are all one with the former.

(m) *In his direct. of war.*

But our *Scots* words,

Right round about,
Left round about,
Sixt Ranke right or left round about.
} *To your first order.*

They ar verie vnproper, and I wishe our commanders could agree to change them, for to turne *round about*, is to bring your *face* to the part where yee stood in before yee turned, and so yee shall *face* not to the *Reare* but to the *Front* againe.

If the Enemie *charge* you on all sides, yee must *face* to the *Front*, *Reare*, and *Flankes*: the Grecians called this Battell φαλαγξ τετραπλευρος. *Alexander* at *Arbela* was forced to draw vp his Battell after this fashion as (n) *Frontinus* doeth report: *Alexander ad Arbela cum hostium multitudinem vereretur, virtuti autem suorum fideret, aciem in omnem partem spectantem ordinavit, ut circumventi vndique pugnare possent.* It is also described by (o) *Ælian* to whom I referre the Reader, for I cannot insist particularlie in all thinges: but you shall marke that when such a *charge* is expected, and that yee are forced to frame such a Battell, yee must enlarge your deipth aboue 10.

(n) *Frontinus Stratagem. lib. 2. cap. 3.*

(o) *Ælian Tact. c. 36.*

But before I goe further, I must aduertise you, of one thing which will serue in all *Motions*: When ye would reduce your Souldiers to their first *station*, yee are to command them, *As yee were*, or *To your first order*: which the (p) Greekes called επ' ορθον αποδοιναι (q) *Leo* ἐπιστρεψον. The French calleth it *Remettez vous*, and so yee are to bring them backe to the

(p) *Ælian. Tactic. cap. 25. & 27.*

(q) *Leo Tact. cap. 7. § 79.*

place from which they went by the contrarie way, As for example, if they turned to the *right hand*: they must returne backe againe to the *left hand*: If they turned to *the left*, they must returne to *the right*: If they turned to *the right about*, they must returne to *the left about*, and so foorth. *Ælian* (r) describeth this *Motion* to bee το εις την προκοθεστωσαν απ' αρχής του ὁπλιτου ἐπιφανειαν αποκαστησαι την ὀψιν, *to restore the Souldiers sight to the former aspect hee had in the beginning*: That is, before hee turned.

(r) *Ælian Tact. cap.* 25

Of Doublings.

Tit. 7.

D*oubling is, a Motion of a part of the Battell* (for the part doubled standeth, and the part doubling onelie moueth) *Whereby either the length or the deipth is augmented*: and therefore *Doubling* is of two sorts, of *Rankes* or of *Files*.

Doubling of Rankes.

Doubling of *Rankes* is a *Motion* whereby the length of the Battell is enlarged, and the deipth diminished, by inserting the one halfe of the Rankes in the other. (a) *Leo* calleth this *Motion* την φαλαγγα ἐπι μηκος εκτεινειν, and το παχος τῆς παραταξεως ἐπι μηκος συστελλειν. (b) *Ælian* calleth it διπλασιαζειν τα ζυγα, or το μηκος. The *Motion* is performed sundrie wayes.

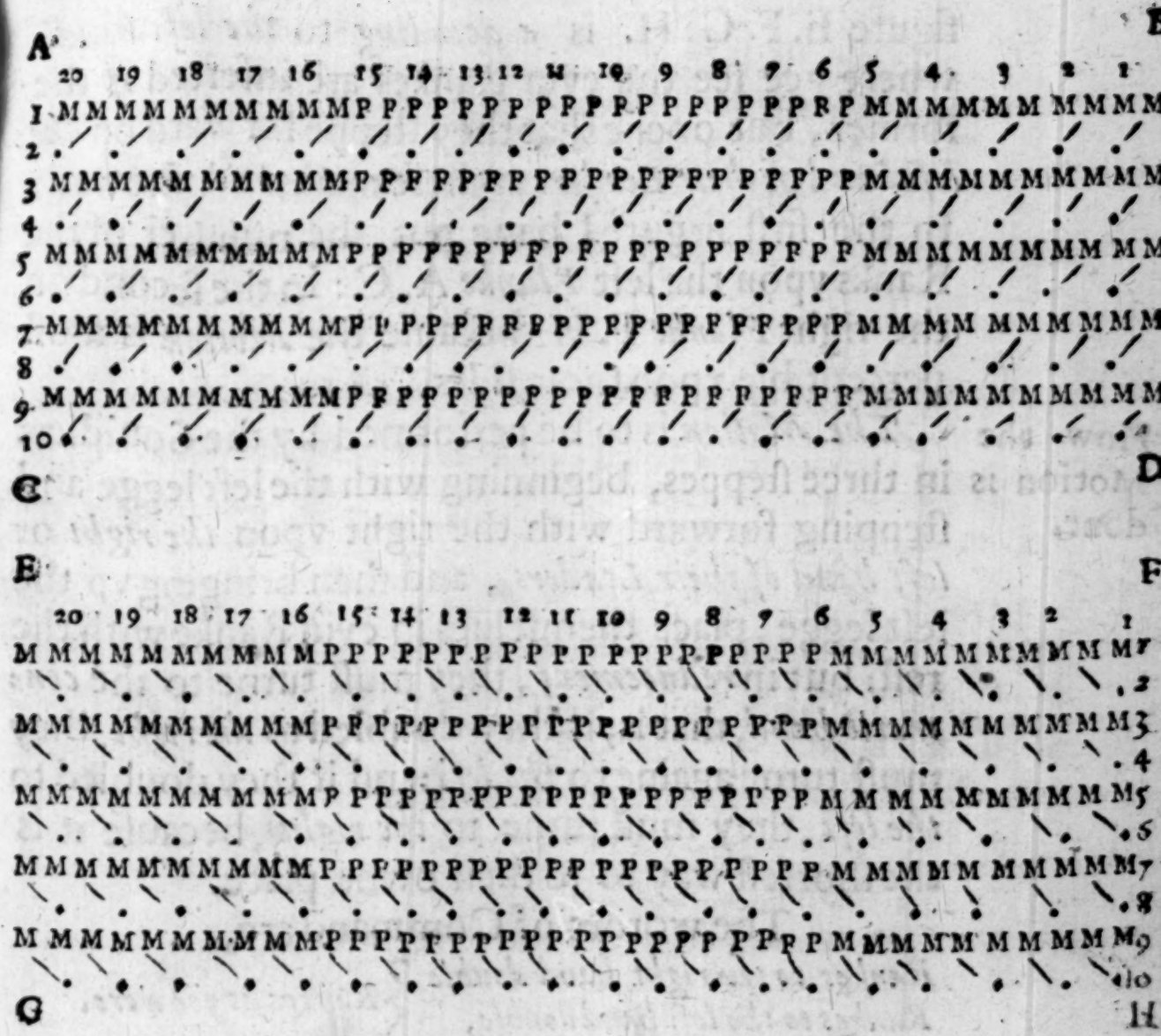
(a) *Leo Tact. cap.* 7. § 16. & c. 9. § 109.

(b) *Ælian Tact. c.* 28.

FIrst when the evin Rankes are inserted into the oddes, as the second in the first, the fourth in the third, the sixt in the fift, and so foorth, and this is to bee done either to *the right* or *left hand*.

If the Commād be to double *to the right hand*, then euerie man that doubles steppes foreward vpon *the right hand* of his *Leader*: If the command bee

bee to *the left*, hee that doubles ſteppes foreward on *the left hand*, of his *Leader*, ſo that of ten ranks they become fiue, and conſequentlie fiue deepe, and if they were before 20. in Ranke, they become 40. and therefore 40. *Files*, as in the figures following is ſhowne.



The figure A. B. C. D. is a doubling of Rankes to *the right hand*, where yee ſee the evin Rankes 2. 4. 6. 8. 10. ſteppe forwards vpon *the right hand* of *their Leaders*, the odde Rankes 1. 3. 5. 7. 9.

The evin Rankes, are marked with these pointes ····· by which you may consider the place they stood in before the *doubling*, and these markes ||||| showeth the way they goe vp on *the right hand* of *their Leaders*: and beeing doubled, yee see the second Ranke is inserted in the first, the 4. in the 3. the 6. in the 5, the 8. in the 7, the 10, in the 9. The figure E. F. G. H. is *a doubling* to *the left hand*, where yee see the evin Rankes are inserted as the former, but onelie that they steppe forward on *the left hand* of *their Leaders* as these marks |||| showeth. In the first firgure I haue put the number of the Ranks vpon the left *Flanke* A. C: In the second on the right *Flanke* F. H. because the *Motion* is most perceptible vpon those sides.

How the Motion is done.

The Motion is to be performed by the Souldiers in three steppes, beginning with the left legge and stepping forward with the right vpon *the right* or *left hand of their Leaders*, and then bringing vp the left legge, place themselues in evin Ranke with the rest: but in *reducement*, they must turne to the *contrarie hand*, that is, if they doubled to *the right*, they must turne againe to *the left*: and if they doubled to *the left*, they must turne to *the right*, because it is the shortest way to to their owne place.

The wordes of Command are,

Rankes to the right hand double,
Rankes to the left hand double, } *Rankes as yee were.*

Our *Scots* wordes of Command,

Double your Rankes to the rihgt hand,
Double your Rankes to the left hand. } *Rankes to your first order.*

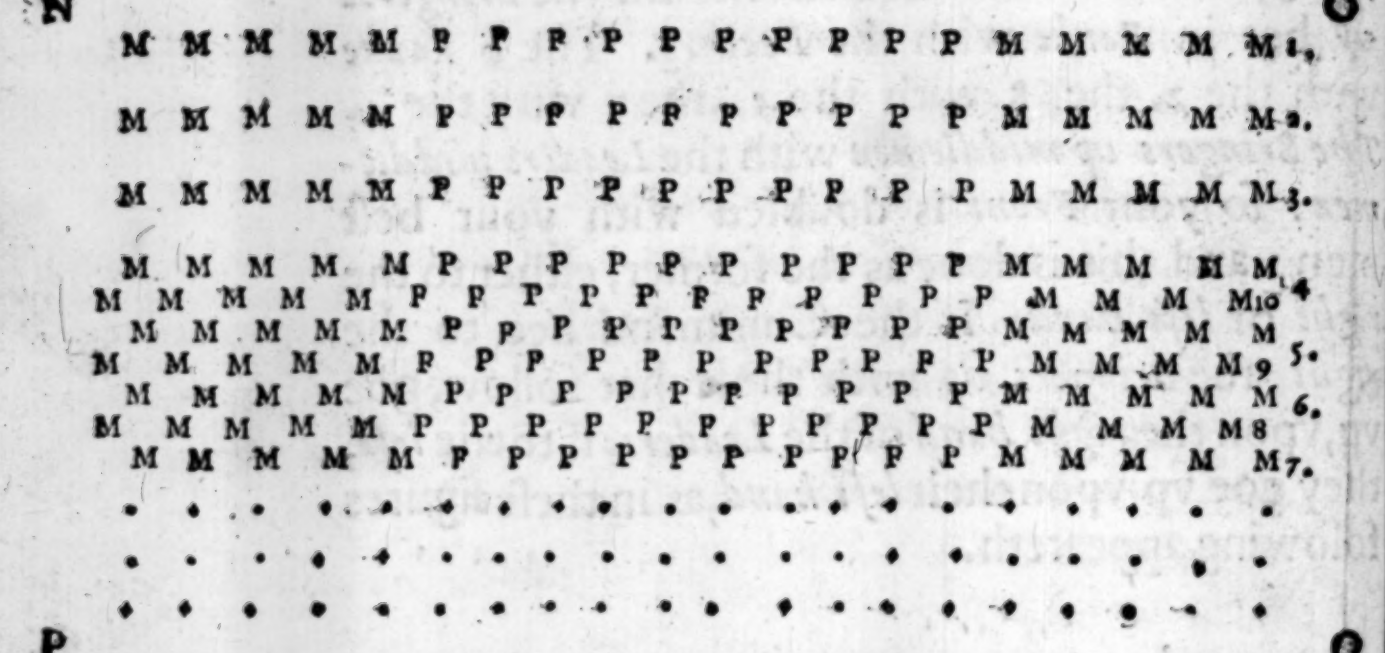
SEcondlie *Rankes* are *doubled* by the *Bringers-vp*, when the last Ranke aduanceth through the distances betweene the Files, and after it the nixt last Ranke

Ranke, and ſo the reſt ſucceſſiuelie till the *Bringers-vp* bee in *Ranke* with the *Leaders*. The 9 *Ranke* with the 2. the 8 with the 3. the 7 with the 4. *The Bringers-vp middlemen* with the *Leaders middlemen*: ſo your *Front* is doubled with your beſt men: and this is done as the former, either to the *right* or *left hand:* If the Command bee to the *right*, the *Bringers-vp* with thoſe that follow, goe vp, vpon the *right hand* of the *Leaders*: if to the *left*, they goe vp vpon their *left hand*, as in theſe figures folowing appeareth.

I K

1. M M M M M P P P P P P P P P P M M M M M
2. M M M M M P P P P P P P P P P M M M M M
3. M M M M M P P P P P P P P P P M M M M M
4. M M M M M P P P P P P P P P P M M M M M
10 M M M M M P P P P P P P P P P M M M M M
5. M M M M M P P P P P P P P P P M M M M M
9 M M M M M P P P P P P P P P P M M M M M
6. M M M M M P P P P P P P P P P M M M M M
8 M M M M M P P P P P P P P P P M M M M M
7. M M M M M P P P P P P P P P P M M M M M

L M



The figure I. K. L. M. is a doubling of the *Bringers-vp* to the *right hand*: where ye ſee the 10 *Ranke* with the 9. and 8. following it, are marching through the diſtances of the *Files*, and going vp vpon the *right hand* of the *Leaders*, vntill the 10 *Ranke* come to the *Front* I. K. And as the *Ranks marcheth* vp to the *Front*, they leaue as many voide places towards the *Reare* L, M. as in the figure yee may ſee marked by theſe points · · ·

The figure N O P Q ⁘ ſhoweth a doubling of the *Bringers-vp* to the *left hand*, where the 10. *Ranke* with the reſt following it, are marching vp vpon the *left hand* of the *Leaders* towards the *Front* N. O. and leaues the voyde ſpaces towards the *Reare* P. Q. as did the former.

Let the *Pickemen* obſerue when they begin to *double*, that they *Aduance* or *mount* their *Pickes*: and when they haue *doubled*, that they *order* or *ouer-end* them: and in *reducement*, that they turne to the *contrarie*

trarie hand, as I ſhew before in the firſt *doubling*.

(c) *Count Mansfield* calles this *Motion*, *A doubling by induction*.

(c) *Count Mansfield in his directions of Warre.*

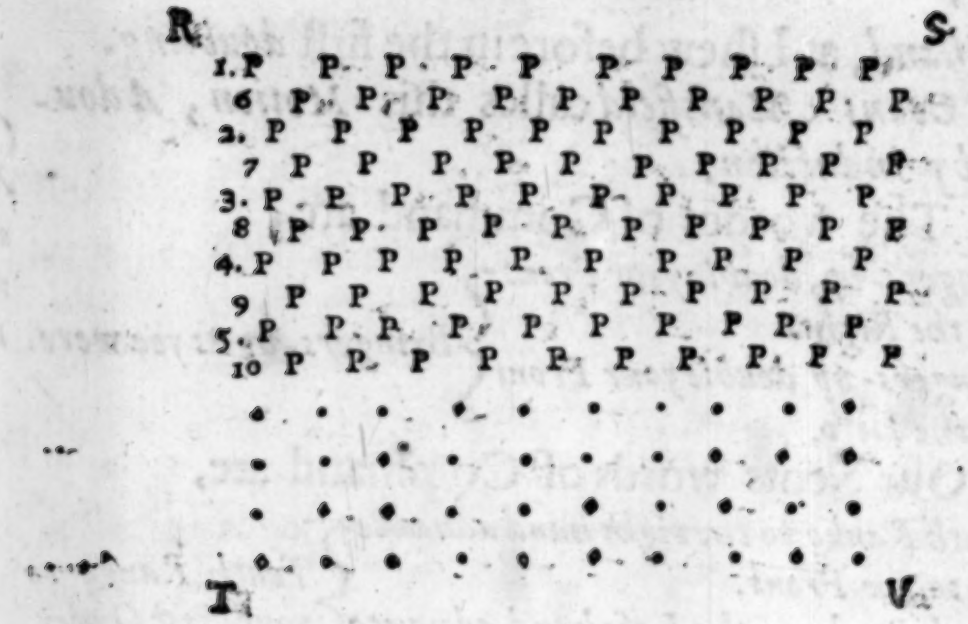
The wordes of Command are;

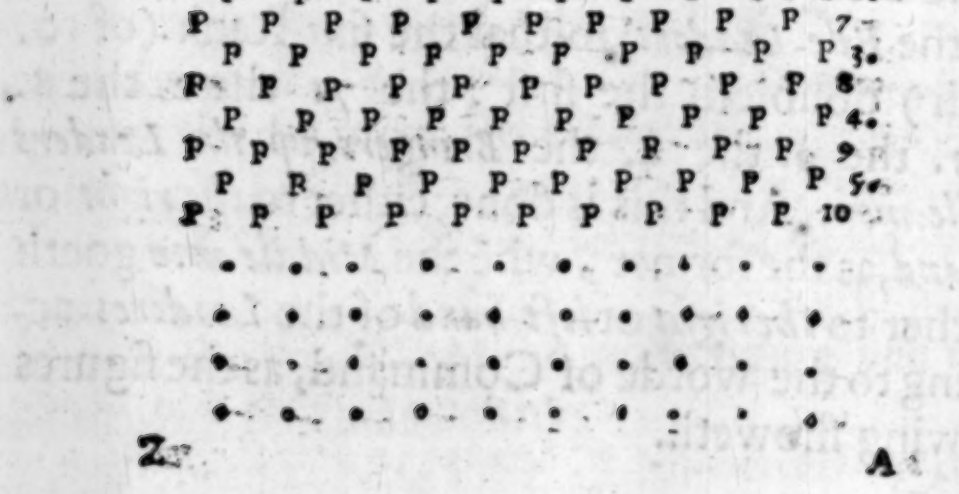
Bringers-vp, double your Front to the Right.
Bringers-vp double your Front to the Left.
} *Bringers-vp as yee were.*

Our Scots words of Command are,

Tenth Ranke to the right hand aduance to the Front.
Tenth Ranke to the Left hand advance to the Front.
} *Tenth Ranke to your firſt Order.*

THirdlie Rankes are doubled by *Middle-men*, or *halfe Files*, that is to ſay, The laſt fiue Rāks marcheth vp through the diſtances betwixt the Files, till the *Bringers-vp Middle-men* bee in evin Front, with the *File-Leaders*, ſo that the ſixt Rank (of 10, deipth) doubleth the firſt, the 7. the 2. the 8. the 3. the 9. the 4. the *Bringers-vp the Leaders Middle-men*: And this is done, either to *the right* or *left hand*, as the former, whē the *Middle-men* goeth vp either to *the right* or *left hand* of the *Leaderes*: according to the worde of Command, as the figures following ſhoweth.





Thoſe two figures are battells of Pickes onelie, which I haue ſet downe for breafe perſpicuities cauſe: for yee may imagine the like *Motions* to be done, by Muſquetiers on the *Flankes*: The Battell then R. S. T. V. is a doubling of Rankes by *Middle-men* to *the right hand*, where ye ſee the ſixt Ranke

Rankwith the 7. 8. 9. & 10. following it, is going vp vpon *the right hand* of *the Leaders*, to the *Front* R. S. and leauing the voyde ſpaces where they ſtood towards *the Reare* T. V. ſo that the deapth which was before from S. to V. is now diminiſhed to the half. X. Y. Z. A. is a doubling by *Middle-men* to the left, where the ſamine rankes marcheth vp vpon *the left hand* of *the Leaders* to the *Front* X. Y. leauing their voyde ſpaces toward *the Reare* Z. A. and diminiſhing the deapth as the former.

The wordes of Command,

Middle-men or halfe Files, to the right hand double your Front.
Middle-men or halfe Files, to the left hand double your Front.
} *Halfe Files as yee were.*

Our Scotes wordes of Command are,

Sixt Ranke to the right hand, aduance to the Front.
Sixt Ranke to the left hand, aduance to the Front.
} *Sixt Ranke to your firſt order.*

Obſerue that thoſe doublinges are to bee done at open order.

FOurthlie, *Rankes* are doubled by *Middle-men* or *halfe Files enteare*, or by *diuiſion*: *enteare*, when the *halfe Files* or laſt fiue *Rankes* faceth about to the hand, to which they are commanded to double; & marcheth out altogether from the Body, till they bee cleare of it, and then face to *the Front*, and march vp to joyne themſelues in *euin Front*, with the *File Leaders*: By *diuiſion*, when thoſe halfe Files doe face the one halfe to *the right hand*, the other to *the left*, and ſo going out from the Bodie, they march vp vpon both *Flankes*, vntill they come and Front with the *File-Leaders*, as may bee ſeene by theſe figures following.

A
B
C
D
E
F
G
H
I
K
The

The figure A. B. C. is a doubling of *the Front* by the halfe Files to *the right hand enteare*, where yee ſee the laſt fiue Rankes C. are paſſed out together from the Bodie, and are marching vp vpon *the right Flank* B. to joyne in evin *Front* with the firſt 5. rãkes. The figure D. E. F. is a doubling to *the left hand*, where the laſt fiue Rankes F. are gone out from the Bodie to the left, and are marching vp *the left Flanke* D. to front with the reſt, as the former did vpon *the right*. G. H. I. K. is a doubling to *the right* and *left* by *diuiſion*, where yee ſee the laſt 5. Rankes I. K. hath diuided themſelues and gone out from the Bodie; the one halfe K. marching vp *the right Flanke* H. the other halfe I. marching vp *the left Flanke* G. to joyne all in evin Front with the reſt.

The wordes of Command are,

Halfe Files to the right, double your Front Enteare.
Halfe Files to the left double your Front Enteare.
} *Halfe Files as yewere.*
Halfe Files double your Front to the right and left by diuiſion.

I haue not ſeene our *Scots* Commanders uſe this *Motion* in their exerceaſe, and therfore I cannot ſet downe their wordes of Command.

In this *Motion*, if you would keepe your ſhot and your pickes together, yee muſt cauſe your ſhot on the Flankes to edge out-ward, and leaue a diſtance for the Pickes to come vp and joyne with the reſt, and your Shot that doubleth, marcheth out, and joyneth with reſt of the Shot.

I haue heard many Commanders slight this *Motion* as vnprofitable: but I doe not approue their opinion, for I hold it the most vsefull *Motion* that can bee practised in doubling of Ranks, and more seruiceable thã any other doubling whatsoeuer: because all other doublings must be done at open order & therefore cannot bee vsed when the enemie commeth to charge, or in time of fight, because that distance is not fit to receiue the charge of the Enemie, but these doublinges are done at close order, & therfore may be vsed in time of fight, and at all other times, without any trouble: Againe, other doublings disturbes the Battell, & maketh a confusion by marching through the Files of the Bodie: And in this doubling, the halfe Files marching out from the Bodie, breedeth no disorder, nor disturbance at all: but on the contrarie bringeth vp fresh aides vpon the *Flankes* against the Enemie, and will affright him no lesse, than if a newe Battaillion werecomming to charge him. Lastlie, it is more conducible for the vse of doubling (which yee shall see heereafter) seeing it extendeth more the length of the Battell, and keepeth it more from ouer-winging, than any other doubling: For if the enimie come vpon you with a ὑπερκυφασις, that is, an ouerwinging Battell, minding to encompasse either of your *Flankes*: by this *Motion* yee may handsomelie rencounter him: For if it be your right *Flanke* which hee persewes, yee ought to vse the doubling *Enteare to the right hand*, A. B. C. If it bee *the left Flanke*, yee are to vse the doubling *Enteare to the left hand* D. E. F. But if hee come vpon you with a ὑπωφαλαγγισις, that is, an ouer-fronting

ting Battell, minding to encompaſſe both your Wings, then yee are to uſe the doubling to *the right* and *left* by *diuiſion* G. H. I. K. ſo that by this *Motion*, yee are readie to reſiſt all his attempes (*d*) Captaine *Bingam* (whoſe learning and vnderſtanding in the Airte *Militar* is ſufficientlie knowne) doth allow of this *Motion*, and commends it aboue the other doublinges. The illuſtrious (*e*) Count *Mansfield* himſelfe (whoſe Authoritie is ſufficient to ſtoppe the mouthes of all contradictors) diſcribeth this doubling, and ſetteth it downe with the words of Command, as verie uſefull: But laying aſide Authoritie, the argument is cleare.

(*d*) *Capt. Bing. in his Notes vpon Æliã Tac. c.* 29. § 3. & 5.

(*e*) *Count Mansfelde in his direction of Warre.*

That Motion which in time of fight, without diſturbance of the Battell bringeth ſupplie vnto it, and annoyeth the Enemie, is a ſteadable Motion.

But, doubling of the Front enteare to either hand or by diuiſion, is ſuch a Motion.

Ergo it is a ſteadable Motion.

The *major* is manifeſt, the *minor* I haue already provene: ſo that this *Motion* remaineth good and ſteadable in ſeruice, although thoſe who vnderſtand it not, diſdaine it, and neglect the practiſe of it: I haue inſiſted longer in this point, than I would haue done, becauſe I cannot diſgeſt the hautie ignorance of manie Commanders, who ſlighteth and contemneth all thinges which ſurpaſſeth the reach of their vnderſtanding.

There is yet other doublings of Ranks, as namely by *Counter-march*, which (*f*) *Leo* deſcribeth in thoſe words μεταβαλλονται ἀπὸ &c. And I haue ſeene it oft practiſed by the *Engliſh*. It is thus done: The Cap-

(*f*) *Leo Tact. c.* 7. § 84.

taine commandeth the Files to counter-march to *the right* or *left* (what *Counter-march* is, yee ſhall ſee heereafter) then the *File-Leaders* beginneth to turne, and the reſt following them, they march downe through the Files, till *the Leaders* bee in evin ranke with *the Bringers-vp*: then preſentlie hee commandeth them *to halt* or *ſtand*, ſo that the laſt fiue Ranke are faced to *the Front*, and the firſt fiue to *the Reare*: The Captaine then if he will haue the Battell fronting as it was, hee commandeth the firſt fiue Rankes to face about to him : which done, they ſhall all haue their faces directed one way towardes *the Front* : But if hee pleaſe to turne the aſpect of his whole Battell towardes *the Reare* hee commandeth *thee Reare* diuiſion, or laſt fiue ranks, to face about, and ſo the whole Battell ſhall bee faced about to *the Reare* : This is of ſingulare uſe againſt an enemie, comming to charge your *Reare*, and to encompaſſe you: For by this *Motion* in an inſtant, yee both double the length of your Battell, and bring your beſt men to receiue the charge of the enemie : And this is the uſe which the Empe-rour (*g*) *Leo* maketh of this *Motion*, who was the breaueſt Commander of his tyme, and who for his exquiſite knowledge in the Arte *Militarie* was brought to weare the Imperiall Crowne.

(*g*) *Leo. Tact.* § *c.* 7.

There is another doubling of Rankes, when the evin Rankes are drawne out fullie from the Bodie towardes either of the Flankes, or elſe when they diuide themſelues, and march out towardes both Flankes together, Count (*h*) *Mansfield* calles this to double the *Front* by the *Flankes*: The Emperour (*i*) *Leo* ſpeaketh alſo of it, and ſayeth, It is to be done by this word of command ξυλδε.

(*h*) *Count Mansfield in his direct. of warre.*

(*i*) *Leo Tac. c.* 7 . § 69.

Rankes also are doubled *by wheeling* the Flanks, into the Bodie, as yee shall see heere after.

The generall use of Doubling of Rankes (*k*) *Ælian* setteth downe clearelie, Διπλασιάζεται δὲ τὸ μηκὸς τῆς φαλαγγος ὅταν ἤτοι ὑπερκερασαι τοὺς πολεμιους βουλονται ἢ αυτοι ὑπερκερασθῆναι προσδοκωσι. *The length of the Battell is doubled, when either they purpose to ouerwing the Enemie or else expectes to bee ouerwinged by him.*

The use of Doubling of Ranks.

(*k*) *Ælian Tact. c.* 28.

This did (*l*) *Cleandridas* the *Lacedemonian* Generall against the *Leucans*, for he surpassing them in multitude, first drew his Battell to a great deapth, that he might allure them to charge, which the *Leucans* seeing drew out their Armie in length & came foreward to encompasse his winges: but *Cleandridas* doubling the length of his φαλαγξ ouerfronted them and ouerthrew them.

(*l*) *Polienus Strat lib.* 2. *in Cleandrida* § 4.

The Emperour (*m*) *Leo* giueth another reason of Doubling the length of the Battell το μηκος εκτεινεται (saith he) δια κομπον. &c. *The length of the Battell is doubled for ornament, and to make a faire show*, or to make it equall with another Battell: or else to affright the Enemie, making him thinke your multitude to be greater then it is: as did (*n*) *Antigonus* against *Eumenes*.

(*m*) *Leo. Tact. cap.* 7. § 69.

(*n*) *Polienus Strat. lib.* 2. *in Antigono* § 19.

But the Emperour (*o*) *Leo* giues an good aduertisement and caution for doubling the length of the Battell, whereof all Commanders should take heede: Ἐποιδη δὲ (sayth hee) το παχος της παραταξεως ἐπι μηκος συστελλεται &c. *When the deapth of the Battell is drawn vp in length, it must not be so lengthned that it be ouerweakned in the deapth, for it will fall out that the Enemies shall easilie breake it asunder and make a passage through it, and will not onelie encompasse it before*

(*o*) *Leo Tact c.* 14. § 108.

but paſsing through the midſt will bee found behind, and there doe great harme: Wherefore a Generall ſhould not onelie ſeeke to prevent this, but to doe the like to the Enemie.

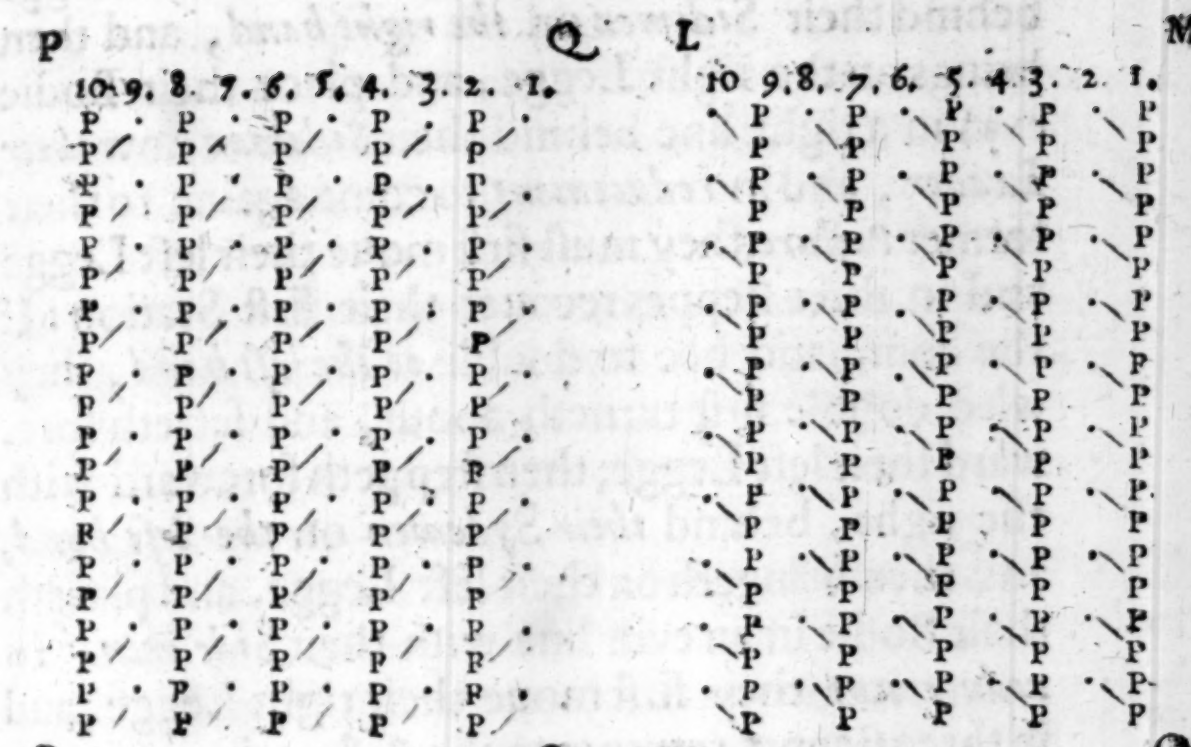
Ælian ſpeaketh of a *doubling* of *Rankes* in place, which is nothing but an opening of Files to a greater diſtance.

OF doubling of Files.

Doubling of Files, is a Motion whereby the deapth of the Battell is increaſed, and the length diminiſhed by inſerting the one halfe of the Files in the other: (p) Leo calleth this *Motion* τὴν φαλαγγα διπλασιασμὸν: and τὴν παραταξιν εἰς βαθος πυκνοῦσθαι. (q) *Ælian* calleth it, διπλασιαζειν το βαθος: And is performed ſundrie wayes.

(p) Leo Tact. c. 7. § 16 & c. 14 § 109.
(q) Ælian Tact. c. 28.

FIrſt, when the one halfe of the Files fall in into the other, the evin Files into the odde, when the command of Doubling is *to the right hand*: the odde Files into the evin, when the command is to *the left*, ſo that of 10. deepe they are made 20. and therefore 20. Rankes and if they were 10. in Ranke, they become but 5. and therefore 5. Files. The firſt is this way done, The right hand File which is the firſt, ſtands ſtill, the ſecond File next it, ſteppes about and moues in into it: euerie one going behind his right hand Sydeman, ſo doth the 4. into the 3. the 6. into the 5. the 8. into the 7. the 10. into the 9. & ſo foorth if there be moe Files in your Battell. Doubling to the *left* is when the left hand File together with the reſt of the evin Files ſtandes ſtill, and the odde Files turnes about to the left and ſteppes in behind their Sydemen on the left hand, ſo that the firſt File is inſerted in the ſecond, the 3. in the 4. the 5. in the 6. and ſo foorth of the reſt of the Files of your Battell, as the figures following ſhoweth.



The figure L. M, N O. ſhoweth you a doubling of Files *to the right hand*, where yee ſee the evin Files 2. 4 6 8. 10. inſerted in the odde Files. 1 3. 5. 7. 9. P. Q. R. S. ſhoweth a doubling to *the left hand*, where yee ſee the odde Files 1. 3. 5. 7. 9. moueth into the evin. 2 4. 6. 8. 10. Theſe points letteth you ſee the place where the Files ſtoode before the Doubling. Thoſe markes / \ ſheweth the way of the *Motion*, which / \ in the firſt figure is towards *the right hand* M. O. and in the other towardes *the left hand* P. R.

How to doe the Motion.

For the right action of this *Motion*, your Souldiers muſt obſerue, that if the commandment bee to double to *the right hand*, then they who double firſt turnes about, and ſetteth foreward the right

Legge, next steppeth foreward with the left legge behind their *Sidemen* on *the right hand*, and then brings on the right Legge, and place their Bodie evin in a right line behind their *Sideman* now *their Leader*, and in *reducement* to come againe to their former *Posture*, they must first moue their left Legge and in three steppes recouer their first Station: If the command bee to double *to the left hand*, they who double first turneth about, and setteth forceward their left Legge, then steppeth forceward with the right, behind *their Sydemen* on *the left hand*, and then bringeth on their left Legge, and placeth their Bodie in an evin line with their *Side.men*. In *reducement* they first moue their right Legge, and in three steppes returnes to the *Posture* they were in.

The wordes of Command.

Files to the right hand double } *Files as yeewere.*
Files to the left hand double }

Our wordes of Command.

Double your Stringes to the right hand } *Stringes to your*
Double your Stringes to the left hand } *first order.*

Obserue that this Doubling must bee done at *open order.*

I haue seene some Commanders in exerceasing, command a Doubling of Files *to the right and left by diuision*: which was done by inserting the evin Files of the right *Flanke* in the odde, and the odde Files of the left *Flanke*, in the evin: But in this *Motion* the Files must consist of a number diuisible in evin numbers, as 8. 12. 16. And this I thinke more curious then profitable

Obserue that *Doubling* of *Ranks* & *Files*, are one anothers *reducements*, but to *the contrarie hand*, as

if there be a doubling of Ranks *to the right hand*, ye may command Files double to *the left*, and so the Rankes are reduced to their first Posture. If the Rankes bee doubled *to the left*, then command Files to double *to the right*, and so yee bring the Rankes as they were. Againe, if there bee a doubling of *Files* to *the right*, command Rankes to double to *the left*, and so yee restore *Files* to their first Station: If the Files bee doubled to *the left*, command Rankes to double to *the right*, and so the Files are reduced.

SEcondlie Files are doubled by *Countermarch* (sayth (r) *Ælian*) when the evin Files countermarch, to *the Reare*, and place themselues behind *the bringers vp* of the odde Files: And this is if the Command bee to *the right hand*: But if it bee to *the left*, the odde Files Countermarcheth and placeth themselues in *the Reare* of the evin. Or it is done, when the Files diuideth themselues (sayeth (s) *Ælian*) that it to say, The Files vpon the one *Flanke* separates themselues from the Files on the other *Flanke* (for yee must conceiue the Bodie to be diuided into two *Flankes*) and countermarcheth to *the Reare*, & there placeth themselues behind the standing Files of the other *Flanke*, according as the word is giuen to *the right* or *left hand*: for if the command bee to *the right hand*, the Files of the left *Flanke* countermarches to *the Reare*, and placeth themselues behind the Files of the right *Flanke*: if the Command bee to the left, the Files of the right *Flanke* doth the like behinde the Files of the left *Flanke*, as in the figurs following.

(r) *Ælian. Tact. c. 28.*

(s) *Ælian dict. cap. 28.*

This figure T. V. X, Y. is a doubling by *countermarch* to *the right hand*. X. Y was *the Reare* of the Battell before the Doubling, but after the Doubling,

bling, yee ſee the 2. 4. 6. 8. and 10. Files are counter-marched to *the Reare*, and placed behind the odde Files, ſo that the deapth which ſtreatched before from V. to Y. is now augmented to the double. A. B. C. D. is a Doubling by *Counter-march* to *the left hand*, where the *Reare* before the Doubling was C. D. and the deapth of the Battell which was onelie from B. to D. is now extended ſo far as the odde Files are countermarched and placed behind the evin Files. The figure E. F. G. H. is the ſecond manner of Doubling, by *Counter-march*, where the halfe of the Files that was vpon the left *Flanke* E. G. to wit, the 10. 9. 8. 7. and 6. hath diuided themſelues from the Files of the right *Flanke*, and are *Countermarched* to *the Reare* and enlarged the deapth F. H. to the Double. In. I. K. L. M. the firſt fiue Files of the right *Flanke* K. M. are diuided from the reſt, and countermarched to *the Reare* of the left *Flanke*, and hath augmented the deapth I. L. as did the former.

The wordes of Command may bee thoſe,

Double your Files by Counter-march to the right hand.
Double your Files by Counter-march to the left hand.
Diuid your Files and double them by Counter-march to the right or left hand.
} *Files as yee were.*

This *Motion* was oft uſed amongſt the *Grecians*, but I haue not ſeene it practiſed in our moderne exerceaſe.

THirdlie, Files are doubled by *advanceing* or *leading foorth*: when the evin Files marcheth out from the Bodie, & placeth themſelues in *a right line*

line before the Leaders of the odde Files, if the Command bee to *the right hand*: and the odde Files before the evin, if the Command be to *the left hand*: or elſe it is done when the one halfe of the Files vpon either *Flanke* marcheth foorth together and advanceth before the Files of the other *Flanke*, according as the Command is to *the right* or *left hand* if to *the right*, the Files of *the left Flanke* advanceth before *the right Flanke*: if to the *left*, the Files of the *right Flanke* advanceth before the Files of the *left Flanke*, as in the figures following.

The figure N.O.P.Q. ſhoweth a doubling to *the right hand* by *advancing* the *evin Files* before the *odde*: N.O. was the front of the Battell before the Doubling: the deapth was frō O. to Q. which now is extended to the double. R.S.T.V. is a Doubling to *the left hand*, by *advancing* the *odde Files* before the *evin:* R S was the *Front* before the douling, and S. V. the deapth, which is extended as the former: The other two figures are doublings by *advancing* of the *halfe of the Files*: Z. A. B. C. is a doubling of the halfe of the Files to *the right*, where the Files of the left *Flanke* Z B, the 10. 9 8, 7. & 6. *advanceth* together before the Files of the right *Flanke*. Z. A. was the *Front* or length of the Battell befor the Doubling which now is contracted to X. Y. A C was the deapth of the Battell, which is now extended to C. A. Y. The other F. G. H I. is a Doubling of the halfe of the Files,

to the *left*; for the Files of the right *Flanke* 1. 2 3. 4. & 5. *advanceth* before the Files of the left *Flanke* the Front of the Battell before the Doubling F. G. is now diminished to D. E. the deapth F. H. is now augmented to H. F. D.

Those *Doublings* extendeth the deapth of the Battell towardes the *Front*, as the *doublinges* by *Countermarch* did towardes *the Reare*.

Those *Doublings* altereth ground, but if yee desire to keepe the same ground, (t) *Count Mansfield* showeth a way, which is to make the Files that are to *double* to *close* their Rankes forewards: and the other to *close* backwards, and so by a little edgeing aside, shall bee placed before them: But the publisher of *his directions* hath mistaken himselfe in saying, that *the Leaders of the halfe, which is to double, will stand alittle beyond the Bringers vp of the other halfe:* for it is *the Bringers-vp of the halfe* which is *to double* that will stand before the *Leaders of the other halfe*.

(t) *Count Mansfield in his Direct of War. pag.* 45.

The wordes of Command,

Files advance, and double to the right hand.
Files advance, and double to the left hand.
Diuide your Files, and double them to the right or left.
} *Files as yee were.*

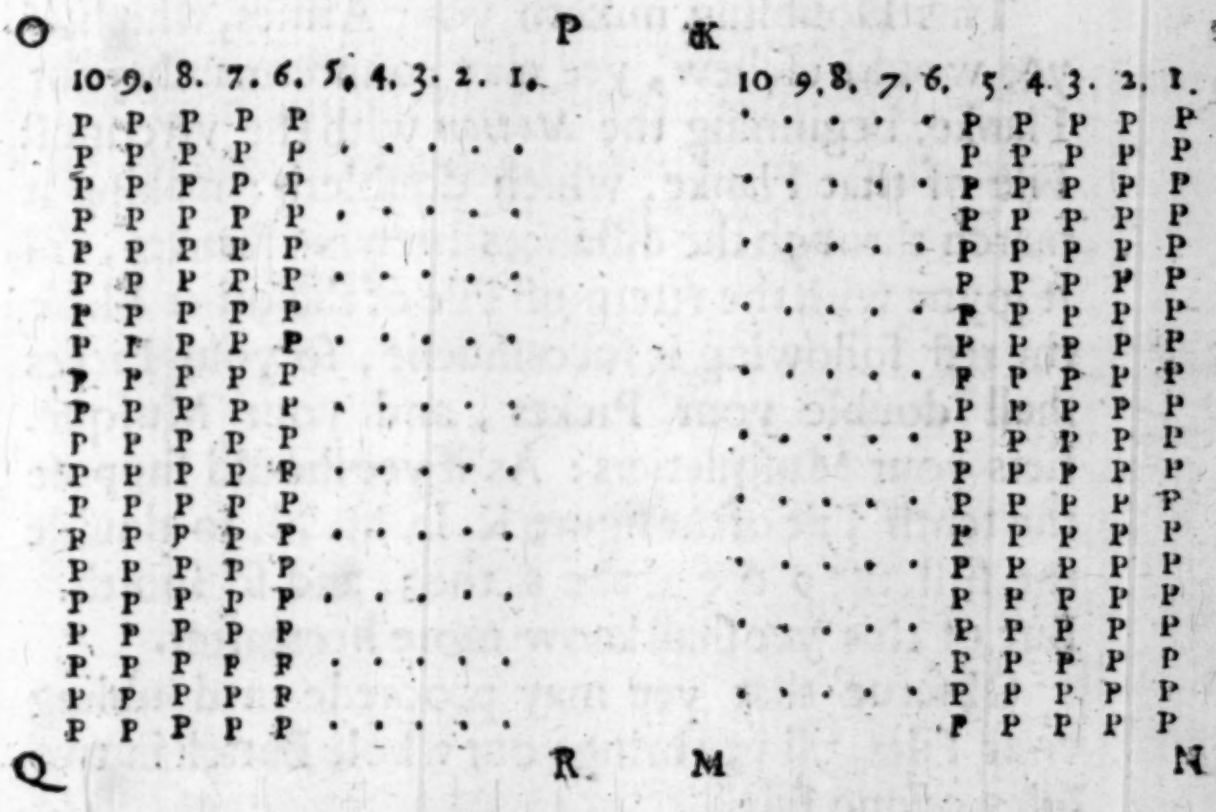
Count Mansfield useth those words.

File vpon File.

Files double the Bodie to the right or left hand.

FOurthlie, Files are doubled by the *Flankes*, that is, When the Files of either *Flanke* are inserted in the other, and so double them, and that either

either to *the right* or *left*: If the Command bee to double the *right Flanke*, then the Files of the *left Flanke* (for yee muſt conceiue the whole Bodie to be diuided into two *Flankes*) faceth to the *right hand*, and marcheth through the ſpaces of the *right Flanke*, till the ſixt File bee in one euin File with the firſt, the 7. with the 2. the 8. with the 3. the 9. with the 4 and the 10. with the 5. and then they face as the reſt: If the word bee to Double the *left Flanke*, then the Files of the *right Flanke* faceth to the *left*, and doe as the former, till the fift File joyne with the 10 the 4. with the 9. the 3. with the 8. the 2. with the 7. the 1. with the 6. as theſe figures following ſhoweth.



The figure K. L. M. N. is a Doubling of the *right Flanke* by the *left*: where ye ſee the Files of the *left Flanke* K. M. which are the 10. 9. 8. 7. and 6.

are joyned with the *Files* of the right *Flanke* L N.

O P Q R ſhoweth a Doubling of the *left Flanke* by the right: where the *Files* of the *right Flanke* P. R. the 1. 2. 3. 4. and 5. are inſerted in the *Files* of the *left Flanke* O. Q. Of both the Battelles, the length K. L. and O. P. are contracted to the halfe; and ſo the Battell is brought into a wing, whereof is made the διπλοφαλαγξ, deſcribed by (t) *Ælian.* These points in al theſe former figurs ſhoweth the place where the Doubling *Files* ſtood.

(t) Ælian. Tact. c. 27.

The wordes of Command,

Files double your right Flanke.
Files double your left Flanke. } *Files as ye were.*

Some ſay,

Halfe Rankes double your right or left Flanke.

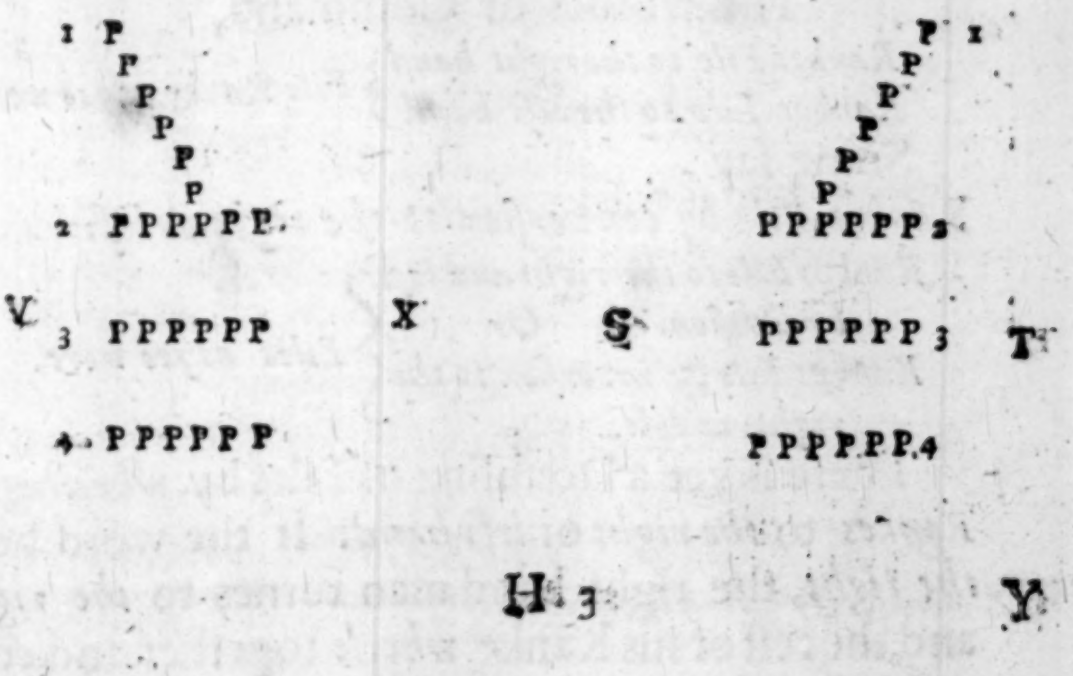
This Doubling mixeth your Armes, which if yee would eſchew, yee may countermarch your Flanke, beginning the *Motion* with the vttermoſt File of that Flanke, which doubleth: making it march through the diſtances betwixt Rankes, till it joyne with the vttermoſt File of the other Flank; the reſt following it ſucceſſiuelie, ſo your Pickes ſhall double your Pickes, and your Muſquetiers your Muſquetiers: As if yee ſhould ſuppoſe the tenth File of the figure K. L. M. N, to double the firſt, the 9 the 2. the 8 the 3. and ſo foorth. But of this yee ſhall know more heereafter.

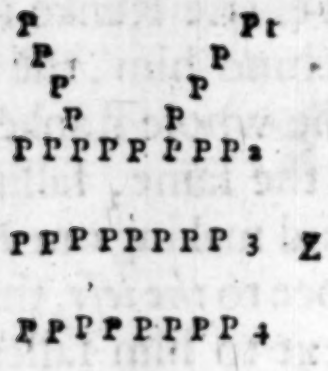
Obſerue that yee may proceede in doubling your Files, till yee bring your whole Battell in two Files, or one File.

Or yee may doe this, by making your Rankes *File* to *either hand*, or both by *diviſion*: If ye com-

mand

mand Rankes to *File* to the *right hand*, the right hand man of euerie Ranke ſtands ſtill, the next to him falles behind him, the reſt of the Ranke follow, vntill the whole Ranke bee in a File: All the Rankes doe the ſame, falling behind their right hand man, and making one *File* of the whole Body. If the word bee to *the left*, the left hand man ſtands firme, the next to him falles behind him, and the reſt follow, and all the Ranke falls behind their left hand man, and ſo are *converted* in one *File*: But in this Motion yee muſt obſerue a *Double diſtance*, Yet if it bee in a *March*, yee may doe it at any *Order*: Some call this Motion, *Fileing by converſion*: But yee muſt obſerue that in a great *Front* yee can not well uſe this Motion. If ye would bring your Bodie in two Files, the one halfe of the Rankes fall into the right hand File, the other into the left hand File, the right and left hand File ſtanding faſt, and the reſt of the Files *inverting* to them, for ſome calleth this Motion *Fileing by inverſion*.





The figure S. T. is a *Fileing* of R*ankes* to *the right hand*, where yee ſee the firſt ranke is caſting it ſelfe in a *File* behind the right hand man. V. X. is a *Fileing* to *the left hand*, where the firſt Ranke is going to *File* behind the left hand man, and as the firſt Rankes in both doeth, ſo yee muſt imagine the reſt to doe in an inſtant. Y. Z. is a *Fileing* to *the right* and *left* by *diviſion*, where yee ſee the halfe of the firſt Ranke falling in behind the right hand man, and the other halfe of it behind the left hand man: which alſo yee muſt conceiue the reſt of the Rankes to doe.

The wordes of Command,

Rankes File to the right hand
Rankes File to the left hand } *File Ranke as yee were.*

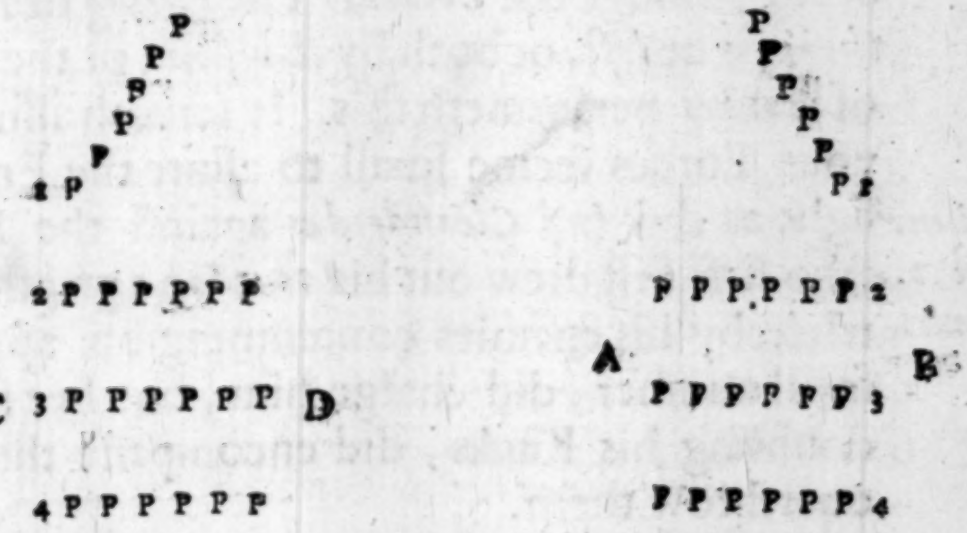
Some ſay,

R*ankes File by converſion to the right or left hand.*

Rankes File to the right and left by diviſion. Or *Rankes File by inverſion to the right or left.* } *Files as yee were.*

There is yet a Doubling of Files by *wheeling* the *Rankes* to *the right* or *left hand*. If the word be to *the right*, the right hand man turnes to *the right*, and the reſt of his Ranke *wheele* together, and come aboue

aboue him on *the left hand*. all the Rankes doeth the like: If the command bee to *the left*, the left hand man turnes to *the left*, the reſt of his Ranke commeth all aboue him on *the right hand*, and ſo all the other Rankes.



The figure A. B. is a *wheeling* to *the right hand*: where yee ſee the firſt Ranke wheeling about the right hand man, and comming vp vpon his *left hand*. C. D. is a wheeling to *the left hand*, where the firſt Ranke is wheeling about the left hand man, and comming vp on his *right hand*, and ſo doth all the reſt of the Rankes.

The words of Command,

Rankes wheele to the right hand, } *Rankes as ye were.*
Rankes wheele to the left hand, }

Yee may wheele Rankes alſo to *the right* or *left* by *diviſion*.

The uſe of *Doubling* of *Files*, is to ſtrengthen the deapth of your Battell, to reſiſt the Enemie, when yee thinke hee mindes to breake through and diuide your forces: It ſerues alſo to let the ſhot goe through your Files, when ye are *marching* towards

The uſe of Doubling of Files.

an Fort, for which the first maner of *Doubling* is proper, & the *Fileing* of *Rankes* to the *right* or *left hand*: Also to giue a Vollie of Musquetados vpon either *Flanke*, or both: or to make a *streete* for a *Generall*, or some great Commander to goe through, or else to lodge the *Colours*: The *Fileing* of *Rankes* to *the right* or *left*, or both by *division*, or the *wheeling* of *Rankes* performeth this. It serueth also to make your Forces seeme small to allure the Enemie to fight as did (*u*) *Cleandridas* against the *Leucans*: who first first drew out his φαλαγξ in a greath deapth, whereby his enemies contemning his apparentlie small number, did charge him, bnt hee instantlie doubling his Ranks, did encompasse them, and ouerthrow them.

(*u*) *Polien. Strat. lib, 2. in Cleandri.* §. 4.

But ye must take heed (as the Emperour (*x*) *Leo* advertiseth in these words παλιν δε μη ουτως πυκνωσαι τὴν παραταξιν εις παχος &c.) That when yee double the deapth of your Battell, yee make not the *Front* of your Armie too narrow, and so giue occasion to the Enemie to *ouerfront* you, & encompasse you, which was (*y*) *Marcus Attilius Regulus*, his error in the Battell against the *Carthagenians* for hee fearing the Forces of the *Carthagenian Elephants* to breake through his Armie, drew his Battell to so great a deapth, that it was easilie encompassed by the *Carthagenian horsemen*, led by *Zantippus* the *Lacedemonian*, and by them vtterlie defeate, and himselfe taken prisoner. *For as too much weakening of the deapth, and doubling the length of your Battell puts in danger to bee diuided and broken: So too much Doubling the deapth, and diminishing the length puts it in perrill to bee ouerwinged, and encompassed:* And therefore

(*x*) *Leo Tact. c.* 14. §. 109.

(*y*) *Polyb. histor lib.* 1. §. 10.

therefore a wise *Commander* will haue a care, if his *Front* bee narrow, to take the advantage of a *Trench*, *River* or *Marish*, thereby to secure his *Flankes*, that the Enemie may not annoy him there, and if hee can attaine to none of those, yet to make use of his owne Waggons.

Obserue that this *Motion* of *Doublings* alters the forme of the Battell, changing both the length and the deapth thereof, which no other *Motion* doeth.

Obserue also, that in Doubling the length of your Battell ye make the πλαγιοπαλαγξ, and in doubling the deapth ye mak the ὀρθιοπαλαγξ described by (z) *Ælian*.

(z) *Ælian Tact. c. 29.*

(a) *Ælian* speaketh of a *Doubling* of the *deapth*, in *place* which is nothing but an *opening* of *Rankes* to a geater distance.

(a) *Ælian Tact. c. 28.*

Of *Evolution* or *Counter-March*. Tit. 8.

Evolution or *Countermarch* called by the *Grecians* (a) Ἐξελιγμὸς. is a *Motion of the whole Battell whereby the Front is brought in place of the Reare, or one Flanke in place of the other.*

(a) *Ælian Tact. c. 26.*

And therefore *Countermarch* is two fold: of *Files*, or of *Ranks*, and both of those, saith (b) *Ælian* is threefold, for either they gaine ground (in *marching* not in *charging*) or loose ground, or keepe that same ground, the first is called the *Macedonian Countermarch*, the second the *Lacedemonian*, the third the *Chorean* or *Persian*.

(b) *Ælian Tact. c. 26.*

The *Macedonian Countermarch by File* (so called from the *Macedonians* who were the *inventers* and

(c) Ælian Tact. c. 27.

ussers of it) is described by (c) Ælian in those wordes ὁταν ὁ λοχαγὸς μεταβαλληται, οἱ δ λοιποι &c. *When the File-Leader turneth his face, and the bringer up with all the rest goe against him on the right or left hand, and passing on to the ground before the Frõt of the phalanx placeth themselues in order, one after another according as the File Leader himselfe hath turned his face.* Or it is, *when the File-Leader turneth his face, and the next to him passing by him, on the right or left hand, placeth himselfe behind him, & so all the rest one after another:* As ye shall see in the figure following.

A B C D is the Battell before the *Countermarch*. E F A B the Battell after the *Countermarch*, which hath left the ground A B C D wherein it stood, which yee see marked with points, and taken the ground before it E F A B, and are all faced about to the

the *Reare*. A B which before the *Countermarch* was the *Front*, doeth yet remaine the *Front*, but the *right hand File* B D is become the *left hand File* B F and the *left hand File* A C, the *right hand File* A E. the *Reare* C D is now the *Reare* E F.

The wordes of Command,

Files Countermarch and gaine ground.

The *Lacedemonian Countermarch by File*, (so called from the *Lacedemonians* who invented and practised this *Motion*) is set downe by (*d*) Ælian in those wordes Λακων δε ὅταν ὁ λοχαγὸς &c. *When the File-Leader turning his face about to the Picke transferreth the whole File to a place equall to the first, & the rest following standeth behind him: or else, When the Bringer-up turnes his face about, and hee that stood next before him passing by on either hand, is placed againe next before him and the rest following takes place one before another as they stood till the File Leader be first.*

(*d*) Ælian Tact. c. 27.

G H I K is the Battell before the *Countermarch* I K L M the *Battell* after the *Countermarch* which hath left the ground it stood in before, and taken the ground behind it, the *Flankes* are changed as in the former figure. H K the *right* Flanke to K M the *left*, and G I the *left Flanke* to I L the *right*: But the *Front* G H is brought to be the *Front* L M contrarie to the former, where the *Front* of both figures A B did keepe still one place.

The wordes of Command,

Files Countermarch and loose ground.

The proceeding of this *Countermarch* is contrare to the former, for the *Macedonian* tooke the ground before the Battell, but this possesseth the ground after the *Battell*: In the *Macedonian* the *Motion* is from the *Reare* to the *Front*, in this the *Motion* is from the *Front* to the *Reare*: The *Macedonian* seemeth to runne away; but the *Lacedemonian* to charge, and therefore it *is* preferred to the *Macedonian* by (e) *Ælian*, because sayeth hee, ἐπιδιώξεως φαντασίαν ἐμποιεῖ τοῖς ἐπιφανεῖσι πολεμίοις. *It maketh a show of falling on, the Enemie appearing behind*: Whereas *the Macedonian* τῆς φυγῆς φαντασίαν παραδείκνυσι τοῖς ὀπίσθην ἐπιφανεῖσι πολεμίοις, *It maketh a semblance to the Enemies appearing in the Reare of flying away*: neuerhelesse, in some cases, the *Macedonian* is of greater use, as if ye desire to gaine some ground of advantage, or else when yee desire to *March* on, & not *giue Battell*, for by it ye doe noways hinder your *March*, but cōtinueth the same, & in the meane time may mak your Musquetiers giue fire vpon the Enemie, so that ye both *March* & *fight*: But the *Lacedemonian* falleth on vpon the Enemie, and interupteth the *March*, (f) *Agesilaus* the *Lacedemonian*

(e) *Ælian Tact. c. 27.*

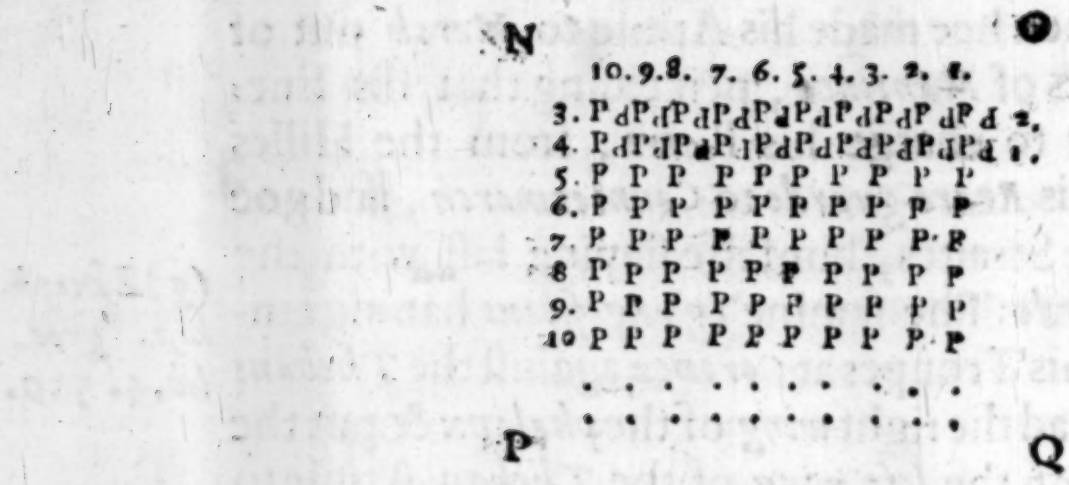
(f) *Zenophon. histor. grec. lib. 6. 605.*

monian Generall seemeth to haue vsed this *Counter-march*, when hee made his Armie to *March* out of the Straites of *Mantinea*, perceiuing that his Enemies were to charge his *Reare*, from the Hilles he made his *Reare-guarde* to *Countermarch*, and goe out of the Straites, himselfe staying last with the *Avantguarde*: The famine. (g) *Agesilaus* hauing embattelled his Troupes at *Coronea* against the *Thebans* himselfe had the right *wing* of the *phalanx* & put the *Argiues* on the *left wing* of the *Theban* Armie to flight, but the *Thebans* hauing beaten the *Orchemenians* who were vpon his left wing forced a passage through them to the Baggadge; which hee vnderstanding, did presentlie *Countermarch* his *phalanx* & ledde against them, where after a furious chocke hee killed manie of them: and manie fled away to *Helicon* after their Confederates.

(g) *Xenoph. hist. grec. lib. 4. 519.*

The *Persian* or *Cretan Countermarch*, used by the *Persians* and *Cretans*, is also called *Chorean*, from the similitude of the *Grecian Dances*, which the *Daunсers*, called *Chorus*, used: for they ordered themselues in Rankes and Files, and danced one through another, keeping the same bounds of the place: This *Countermarch* is described by (h) *Ælian* in those wordes ὁ δὲ χορικὸς γινεται &c. *The Chorean is, when the File-leaders turning to the Picke or the Target preceedeth the File: The rest following, till the Leader haue gotten the place of the Bringer-vp & the Bringer vp the place of the Leader, the Bodie mouing joyntlie together, so that this Countermarch maintaines and keepes the same ground the Batell stood in:* And this is our *Moderne Countermarch* which wee use in our exerceise.

(h) *Ælian Tact. c. 27.*



Yee ſee the figure N O P Q, where the *File-leaders* of euerie *File*, with their next *followers*, that is to ſay, The firſt two Rankes are turned to the *right hand*, and hath begun to *Countermarch*, and are in the diſtances betwixt the *Files*, ſo that the two laſt of euerie *File*, that is, The 10. and 9. Rank hath marched vp with the reſt to the *Front* N O. and hath left the place of the *Reare* P Q ſo much voyd as the firſt two Ranks hath marched through the *Files* from the place of the *Front*: ſo that the *File-Leaders* ſhall *march* vntill they come to the place of the *Bringers-vp* P Q. and the *Bringers vp*, till they come to the place of the *File leaders* N O. and there doe ſtand, and face about with the reſt.

(i) *Bingam in his Notes vpon Ælians Tact. c. 28.*

Captaine (*i*) *Bingam* expreſſeth this *Motion* more liuelie by figures of Armed Picke-men.

The wordes of Command,

Files to the right hand Countermarch.
Files to the left hand Countermarch.

Our wordes of Command are,

Stringes to the right hand Countermarch.
Stringes to the left hand Countermarch.

Becauſe

How the Motion of this Counter-march is done.

Becauſe this *Chorean Countermarch* is that which is uſed in our exerceaſe, I will ſhew you how the *motion* is performed. If the word of Command be to *Countermarch* to the *right hand*, then all the *File-leaders* at one inſtant ſtepeth foreward with the right legge: and bringing about their left legge turneth their Bodie to the *right hand*, and ſo *march* downe through the Files, till they come to the place of the *Bringers-vp*, where they ſhall ſtand, the reſt that followeth the *File-leaders*, muſt not offer to turne, before they haue come vp to the place of the *File-leaders*. If the Command bee to the *left hand* then the *File-leaders* muſt ſtep foreward with the left leg, and bringing about the right legge turne their Bodie to the *left hand*, & *march* downe as the former; The figure N O P Q ſhoweth a *Countermarch* to the *right hand*. The other to the *left hand*, by it may be eaſilie vnderſtood, for if yee make the *File-leaders* to turne toward N P. which yee ſee now turned towards O Q. it ſhalbe a *Countermarch* to the *left hãd*.

It ſeemeth to mee to be this *Chorean Countermarch* whereof the Emperour (*k*) *Leo* ſpeaketh, giuing this word of Command μεταλλαξον. (*k*) *Leo Tact. c. 12. § 65.*

It is to bee obſerued in this *Motion* of *Countermarch*, that euerie *follower* remarke his *Leader*, and his *right hand man*, that by them hee may keepe a due diſtance; for otherwiſe the leaſt diſorder in this *Motion* will breed a confuſion of the whole Bodie.

Obſerue alſo that this *Motion* of *Countermarch* cannot bee done, but at *open Order*: Alſo it ought not to bee practiſed when the Enemie is neare hand: for if the Enemie ſhould ſuddenlie *charge* a

Battell, while it is *Countermarching*, hee should assuredlie ouerthrow it, so that in this case, the best expedient is to *face about* your Battell.

The use of *Countermarching* of *Files* is, if the Enemie appeare in the *Reare* and come to *charge* you, yee may by this *Motion* bring your *File-leaders* who are your best men to encounter with him: for it was euer the use of good Cõmanders to bring the *front* of their Battel against their enemies: Thus *Frõtinus* witnesseth, *Alexãder* & *Iulius Cæsar* to haue bene accustomed to bring the Souldiers who were in *acie* or the *Front* of the Battell, to fight against their Enemie (*l*) *Alexander Macedo cum haberet vehementem exercitum, semper eum statum belli elegit ut acie confligeret. Caius Cæsar Bello civili cum exercitum veteranum haberet, hostium autem tyronem esse sciret, acie semper decertare studuit.*

(*l*) *Frontinus Strat. lib.* 1. *c.* 3.

OF Counter-marching of Rankes.

Countermarching of *Rankes* is when one *wing of your Battell is brought in place of the other, or the wings into the midst of the* Battell, *or one wing to double the other.*

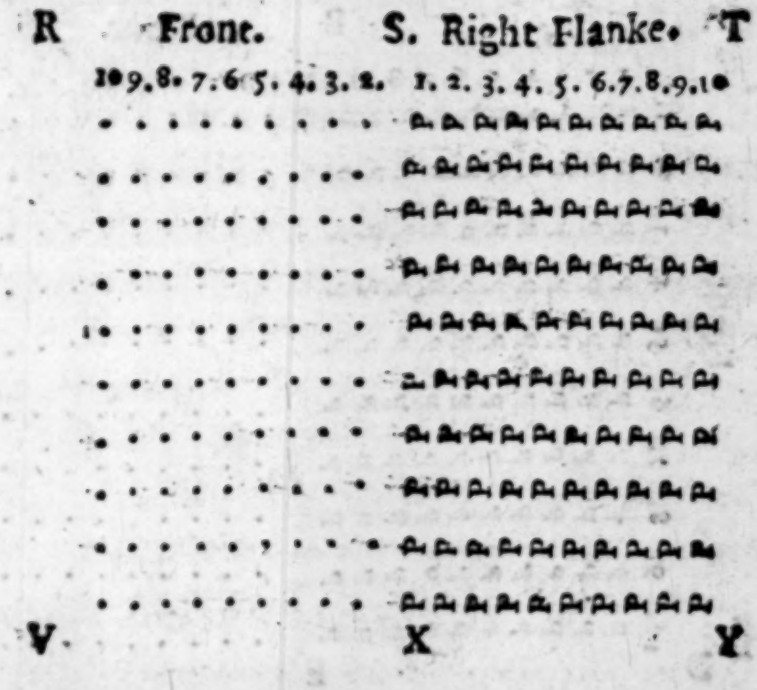
This *Countermarch* is also threefolde as the former of *Files*, for it is *Macedonian Lacedemonian* and *Chorean*. The *Macedonian* taketh the ground which is on the contrare *wing* from the Enemie, and therefore seemeth to march away from him.

The *Lacedemonian* taketh the ground which lyeth on the side of that *wing* which is towards the Enemie, & therefore maketh a show of *charging* him. The *Chorean* keepeth still the same ground whereon the Battell stood before the *Countermarch*: *Ælian* speaketh but little of those coũtermarches by Rãks, neither haue I sene them much used in our exercise:

Yet

Yet for your vnderſtanding I will ſet downe their *Motion*, and their figures, becauſe ſome good uſe may bee made of them.

In the *Macedonian Countermarch* by *Ranke the right hand corner File faces* to *the left hand*, & ſtands, the reſt of euerie Ranke paſſes through, and place themſelues orderlie behind their *right hand ſidemen*, beginning either with the vttermoſt File on the *left Flanke*, or with the File next the *right hand File*, and ſo they take vp the ground which was on the *right wing* of the Battell.



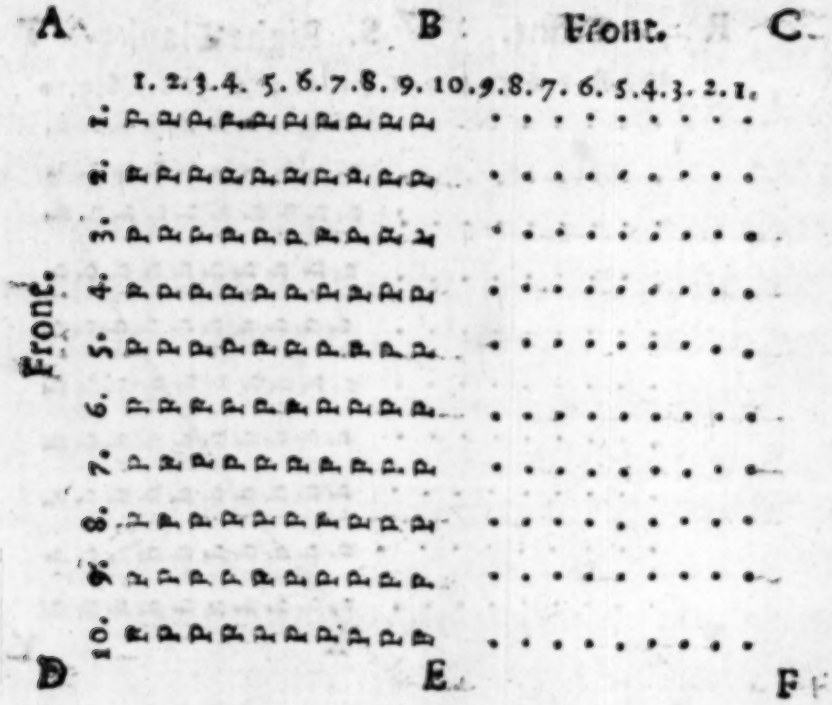
R S V X is the Battell before the *Countermarch*, S T X Y the Battell after the *Countermarche*, which hath left the place it had, and takin the place vpon the *right wing*, and are all faced about to the *left*; ſo that the front before R S is now become the *right* Flanke S T. The *right hand File* before S X is now become the *Front*.

The words of command

Left wing Countermarche through to the place beyond the right wing. or

Rankes Countermarche from the left wing to the right.

The *Lacedemonian Countermarche* by *Ranke* is when the *left hand corner File* turnes his face to the *left hand* & the reſt of euery Rank paſſe through to the *left*, and place themſelues orderly before their *left hand ſide-man*, beginning either from the vttermoſt *File* on the *right hand*, or from the *File* next to the *left hand File*.



Yee ſee this Battell hath left the place where it ſtood B C E F, and taken the ground beyond the *left wing* A B D E, & they are all faced about to the *left*. The *Front* before the *Countermarch* was B C and is now become the *right Flanke* A B. The *right hãd File* C F is now the *Front* A D; The *left hand File* B E keeping ſtill its place becomes the *Reare*.

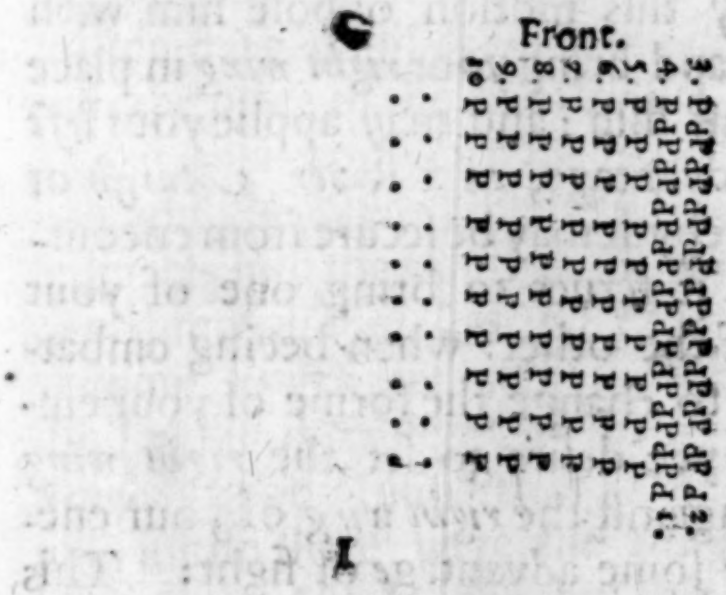
The

The wordes of Command.

Right wing Countermarche through to the place beyond the left wing. or

Rankes Countermarche from the right wing to the left.

The *Chorean Countermarche* by *Ranke* is when the *right hand corner File* faces to the *left*, and marches forward to the place of the *left hand File*: the reſt of euery rank following it,& the body mouing joyntly together while the *right hand File* come to the place of the *left hand File*, and the *left hand File* to the place of the *right hand File*, ſo that the bodie keepeth ſtill that ſame ground it had before: or to doe this more eaſily, *face* only about your Battell to the *left*, and then command a *Countermarche* of *Files* and this will produce the ſamine effect,: for it is all one to bring the *front* of your Battell to the *Reare* when it is *faced* to the *right* as to bring the *right wing* to the *left* before it bee *faced*.



In this Battell ye ſee the firſt man of euery *Ranke* with his *Sydman* that is to ſay, the firſt two Files on the *right Flank* H K are turned & are *Countermarching* through the diſtances betwixt the Ranks: the reſt hath followed them on, to the *right Flank* and hath left the place of the *left Flank* G I ſo much voyd as the firſt two Files hath marched through the Ranks from the place of the *right Flanke*, ſo that the *right hand File* ſhall *marche* on till it come to the place of the *left hand File* G I: And the *left hand File* till it come to the place of the *right hand File* H K, and ſo the Battell ſhall maintaine the ſamine ground it ſtood in, and bee *faced* to the *left*.

The words of Command are,

Ranks to the right or left hand Countermarche and maintaine ground.

Our words of Command are;

Countermarch your Ranks to the right or left hand.

The uſe of *Countermarching* by Ranks is: when the enemie appeareth on your *left wing* to charge you, yee may by this motion oppoſe him with your beſt men, and bring your *right wing* in place of the *left* againſt him: and may applie your *left wing* to ſome advantage, as a *River Mariſh* or *Trench*, that thereby it may be ſecure from encompaſſing: or elſe it ſerues to bring one of your *wings* in place of the other: when beeing embattelled ye minde to change the forme of your embattelling: as if yee deſire to ſet the *right wing* of your Battell againſt the *right wing* of your enemies Battell for ſome advantage of fight: This did (*m*) *Pauſanias generall* of the *Grecian* armie at

(*m*) *Herodot. in*

the

the Battell of *Platea* againſt the *Perſians*: who hauing embattelled the *Lacedemonians* in the *right wing* of his armie and the *Athenians* in the *left*: *Mardonius* the *Perſian Generall* gaue the *Thebans* and other *Greekes* his *right wing* and the *Perſians* the *left wing*, Now *Pauſanias* deſiring to oppoſe the *Athenians* againſt the *Perſians* as beeing better acquainted with the *Perſian* fights then the *Lacedemonians*, he *Countermarched* his *right wing* to the place of the *left*: and ſo brought the *Athenians* againſt the *Perſians*, which *Mardonius* perceiuing did the like, & immediatlie *Countermarched* his *right wing* of *Thebans* to the *left wing* of the *Perſians* as fearing to joyne the *Perſians* with the *Athenians*. *Calliope. 248. & Plutarch. in Ariſtide.*

By this manner of *Countermarche* yee may bring your *wings* in place of the body of your batallion which is this done: Your *right hand File faces* to the *left*: the *left hand File* to the *right*, and *marche* both in towards the center of the Battell while they meet other face to face: the reſt of each Ranke vpon both *wings* followes them and *marches* out vntill the two *middle Files* haue gotten the place of the *corner Files*, and the *Corner Files* the place of the *middle Files*. By this meanes *P. Scipio* making warre in *Spaine* againſt *Aſdrubal* brought the *Romans* into the *wings*, and the Confederates into the midſt of his Battell, whereby he ouerthrew *Aſdrubal*, as (*n*) *Polybius* and (*o*) *Livius* at more length reportes. This is of excellent uſe in our diſcipline, to bring the picks to the *winges* & the Muſquetiers to the midſt of the Battell, incaſe there were ane *charge* of *Horſe* vpon both your *Flanks*, for by this, the Pickemen

(*n*) *Polyb. Hiſt. lib.* 11 *Sect.* 7.

(*o*) *Livius. decad* 3. *lib.* 8. 204.

would receiue the charge of Horſe, and the Muſquetiers giue fire vpon them.

Ye may alſo by this *Motion* double one *wing* with another to mak the διπλοφαλαγξ: which is done as before, except that the *Flanks* doe not march through, but when the *Corner-File* of the one *Flanke* is come in evin line, and joyned with the *Corner file* of the other *Flanke*, then yee command an *halt* and *a faceing* of them all to the *Front*:

Obſerue, that the *Countermarch* of *Files* & of *Rāks* taks not the denomination *à movente*, as would appeare: but *à loco in quo fit motus evolutionis*: for in a *Countermarch* of *Files*, it is the *Ranks* that *countermarches* aud moues downe through the diſtances betweene the *Files*, the firſt *Ranke* beginning, the ſecond with the reſt, continuing the *Motion*, till it bee ended: In a *Countermarch* of *Rankes*, the *Files Countermarches*, and moues through the diſtances betwixt the Rankes: the *Corner-File* which hath the command to *Countermarch*, beginning the *Motion*, and the reſt of the *Files* continuing it vntill it bee finiſhed. And therefore in the *Countermarch* of *Files*, the *Motion* is in the *deapth* of the Battell, in the *Countermarch* of *Rankes* the *Motion* is in the *length* of the Battell. Hence it is, that the illuſtrious *Count* (p) *Mansfield* calleth a *Cõtermarch* of *Rankes* when the *Front* is brought in place of the *Reare*, and a *Countermarch* of *Files* when one *Flanke* is brought in place of the other, which is contrarie to the common appellation both of the Auncients and moderns, or elſe I cannot ſee how hee can bee reconcealled vnto them.

(p) *Count Mansfield in his Direct of war.*

Of

Of *Closing*, and *Opening* the *Battell*. Tit. 9.

CLosing, is *a drawing of the Battell to a lesse distance*. Opening, *an extending of it to a greater distance then it had before: and both are either in length or in deapth*. And therefore two folde: of *Files* and of *Rankes*.

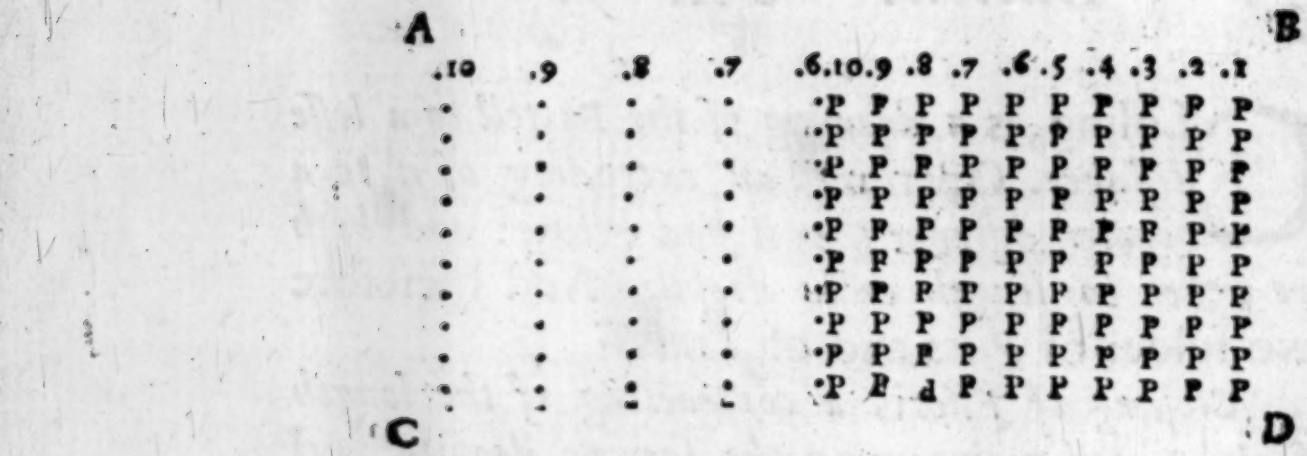
Closing of Files is *a contracting of the length of the Battell maintaining the samine deapth*, and it is threefolde, for *Files* are either closed to the *right hand*, or to the *left*, or to the *midle of the Battell*: The (*a*) *Greekes* calleth these *Motions* πυκνοειν ἐπι το δεξιον κερας or ἐπι το ευωνυμον κερας or ἐπι μεσην την φαλαγγα. *To thicken to the right wing or the left wing, or the midst of the Phalanx*. (*b*) *Leo* calleth the closing to the *right* and *left* σπιγγεσθαι κατα πλευραν: *To bee thickned towardes the sides*.

Ælian (*c*) sheweth how the *closing* to the *right hãd* is to be done in those wordes εαν δ' ἐπι το δεξιον &c. *Ye must command the right hand corner File to stand still, and the rest turning their faces to the Picke to advance forwards towardes the right hand, untill they haue gotten the distance commanded, the second File first taking his distance, and the rest their distance from him: and then all to face as they were.*

(*a*) *Ælian Tact. c.* 32.

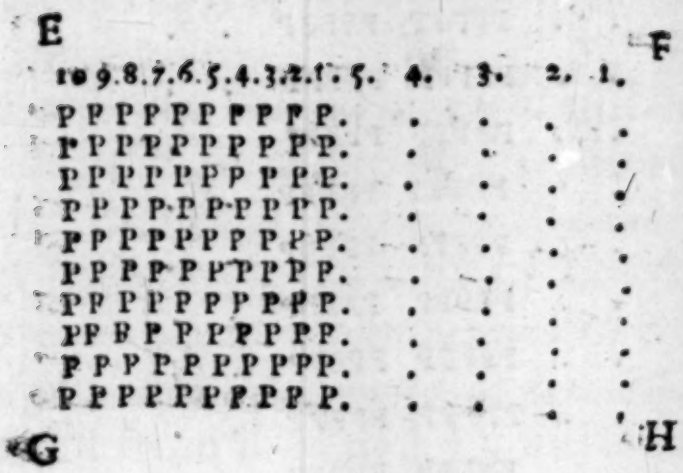
(*b*) *Leo. Tact. c.* 7 §. 33.

(*c*) *Ælian. d. cap.* 32.



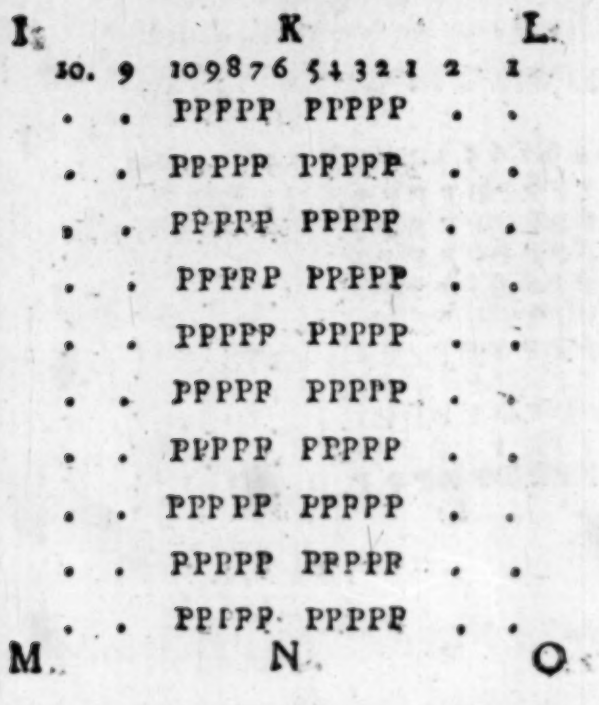
The figure A B C D is the boundes where the Battell ſtood at *open order*; imagine then the *right hand File* B D to haue ſtood ſtill, and the reſt of the *Files* to haue *marched* from the *left flanke* A C. towardes the *right* B D ſo that they are contracted to halfe the boundes they poſſeſſed before the *cloſing*, and therefore ſtandes at *order* or the *diſtance* of *three foote*, from A C to the *left hand File*, is the boundes which is left after the *cloſing* wherein the halfe of the Battell did ſtand before the *cloſing*, to wit the 10. 9 8. 7. and 6. *Files*: ſo that the 10. *File* doeth now ſtand in the place where the 6. ſtood before the *cloſing*.

If yee *cloſe Files* to the *left hand*, yee muſt make the *left hand corner File* ſtand ſtill, and the reſt *facing to the Target* advance forward to the *left hand* as the former did to the *right* vntill they haue all gotten their diſtance requyred, and then they face as they were.



EFGH is a *closing* to the *left hand*, where yee must conceiue the *left hand file* E G to haue stood still, and the rest of the Files to haue advanced from the *right Flanke* F H vntill they haue contracted themselves as yee see: so that they possesse only the halfe of the boundes they had before they closed: From F H to the *right hand File* is the boundes wherein the halfe of the Battell stoode before the *closing* to wit, the 1. 2. 3. 4. and 5 Files: so that the first file possesseth now the place which the fyft had.

If yee would *close* your Battell to the *middle*, (saith *Ælian*) yee command the two *middle Files* to stand still, and then the *diphalanx* (that is the halfe Battell) on the *right wing* to face to the *Target*, and the *diphalanx* on the *left wing* to face to the *Picke*, and then to moue forwards to the middle of the *phalanx*, the two *middle files* also close, and so after they haue gotten their true distance they face as they were. *Ælian. d. c. 32.*



This figure is a *closing* of the Battell to the *middle*: The *middle Files* in K N: that is, the 5 & 6 files ſtands ſtill: *The halfe Battell* K L N O moues from the *right* Flanke L O towards the *midle* K N: The *halfe* Battell I K M N moues from the *left* Flanke I M towards the *middle* K N: ſo that the whole *Battell* I L M O is *cloſed* to halfe the diſtance it had before, leauing the boundes voyde on the *right* Flanke L O where the firſt and ſecond *Files*, and on the *left Flanke* I M: where the 9. and 10. did ſtand.

The wordes of Command,

Files cloſe to the right hand.
Files cloſe to the left hand. } *To your order or clo order.*
Files cloſe to the middle, or }
as ſome ſay, *Files cloſe*: for when the Command is onelie for *Files* to *cloſe*: without nameing any hand, it is to beevnderſtood a *cloſing to the middle.*

Our Scotes words of Command,

cloſe

Close your Stringes to the right hand,
Close your Stringes to the left hand, } *To your first or second distance.*
Close your Stringes.

Some will *Close Files to the right* and *left* by *division* making the *halfe Battell* on the *right hand*, moue from the *middle* to the *right hand File*, and the other *halfe* on the *left hand*, to the *left hand File*, leauing the voide distãce in the *middle* which other *closings* leaues vpon the *wings*, as if the *halfe Battell* should moue from K N to L O, and the other *halfe* from K N to I M, with this word of Command,

Files close to the right or left by division to your order, or close order.

To *reduce* your *Files* after *closing* to their first *posture* or *station* is to *open Files* to the distance they had before their *closing* of which I shall shortly speake.

(c) *Ælian* saith that *closing* of *Files* is to bee done by *facing* as indeed it is the most fitte action, but I haue seene many Commanders in exercise use this *Motion* without any *Facing*; only mouing *sydelings* to the hand to which the command is to *close*, and forsooth they will defend this to bee good, because say they *Facing* in so small a bounds as a private company taketh vp is needlesse, but, I say they maintaine ane errour, for laying aside the authoritie of the Grecian practise (which justly may bee tearmed the touchstone of martiall discipline,) they are easily convinced by reasone, because *Facing* performes the *Motion* more assuredly and more gracefully then going asydwayes, seeing their steps are not sure being subject to stumbling, neither the actiõ comly, and although the first or second *file* next the hand

(c) *Ælian Tact. c. 32.*

How the Motion is to bee performed.

to which they *close*, haue but a litle ground to goe: Yet the ground doth accresse according as the *Files* are remoued from the *standing File* (which our blunt Commanders doth not consider), so that the vttermost File must *marche* the halfe of the boundes wherein the battell stoode before the *closing*: as for example, Say, yee had a single company of 200 men, making you 20 in *Front*, and standing at *open order*, sixe foote betwixt *Files*: The bounds that the *length* of your Battell takes vp, is *120 foote* (this is found by multiplying the number of your men in *Front* by the distance they stand in: as 20 multiplied be 6 the *factum* is 120) if then yee command *Files* to *close* to the *right hand* to their *order* or distance of 3 foot: the *left hand File* shall haue *60 foote* of ground to *march* before he *close* to his distance requyred: which if hee *march sydelings* yee may easily consider what a stedfast and gracefull *Motion* it will bee: The Argument then is evident.

The most assured and most gracefull Motion is the best Motion.

But so it is, that closing of Files by facing, according to the Grecian forme, is the most assured and most gracefull Motion.

Ergo,

Closing of Files by Facing is the best.

The *major* I hope no man vvill deny: The *minor* I haue alreadie proven. This I thought good to aduertise you, whom I would wish to learne the Arte Militare, *scientifice*, and not according to the vulgare. Καπηλες for there are manie men who per-

pertinaciously will maintaine their badde customes, and will obtrude them for precepts and good Laws vpon men, as also I haue knowne manie Commanders more fraught with a Thrasonicalll ostentation, then any skill to performe their charge.

Of Closing of Rankes.

Closing of *Rankes* is a *contracting of the deapth of the Battell*, and it is performed one way only, to wit, towards the *front*, which is thus done.

The *File-leaders* or *first Ranke* stands still, the *second Ranke* comes vp and closes to the distance commanded, the rest of the Rankes moue vp, and close to the samine distance, euerie man taking his distance from his *Leader*.

This figure PQRS is the boundes wherein your Battell stood at *open order*, or distance of 6. foote betwixt Rankes, Now the *deapth* is contracted and the Ranks hath *marched* vp from the *Reare* RS, and closed towards the *Front* PQ. to

their *order* or distance of 3 foote, so that your Rankes possesses only the halfe of the boundes they had before the *closing* : from R S to the 10 Ranke is the voyd ground wherein the halfe of your *Rankes* did stand before your *closing* to wit, the 10. 9. 8 7 & 6. so that the 10 Ranke stands now in the place where the 6 stoode before the *closing*,

The wordes of Command,

Close your Rankes to your order or *close order.*

Our wordes of Command

Rankes close to your second or third distance.

(d) *Leo Tact. c.* 7. §. 84.

The Emperour (d) *Leo* speakes of a *closing of Rankes backwards* to the *Reare*, which he calles σπιγγεσθαι κατ' ὄρον; this *Motion* because it is not commodious nor yet aggreeable to our moderne practise I will not touche.

OF opening of Files.

OPening, is an *extension of the length or deapth of the Battell* and therefore is twofolde: of *Files* or of *Rankes*.

Opening of *Files* is an *extension of the length of the Battell in place*: and it is threefolde as was the *closing*: For *Files* are *opened* to the *right hand*, or to the *left hand*, or to *both*.

Opening of *Files* to the *right hand* is thus performed. The *left hand File* stands still, the next *File* vnto it first taketh its distance pressing vpon the next File on the *right hand* and so the rest of the *Files* successivelie still presseth upon the *right hand* till they haue all obtained the distance commanded,

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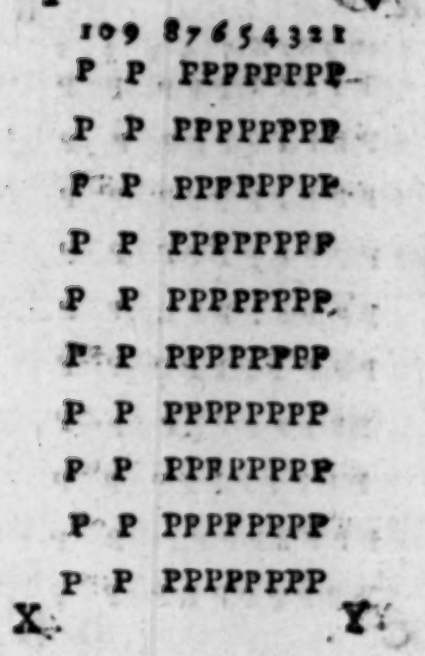
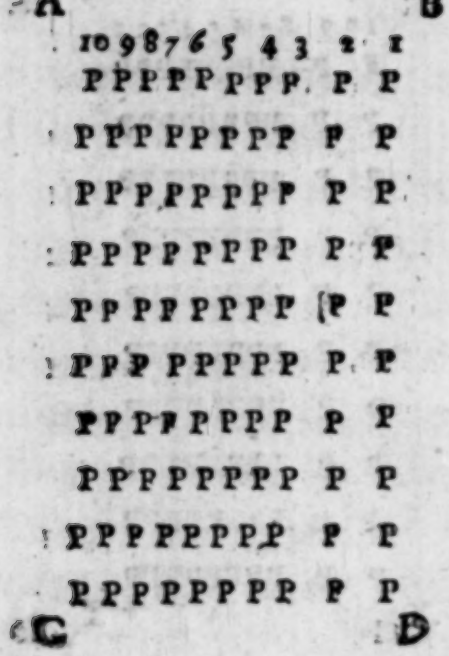


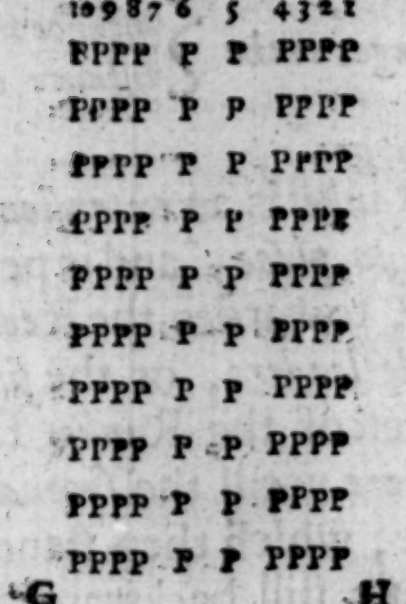
TVXY is an *opening* of *Files* to the *right hand* where yee muſt conceiue the *left hand* File TX which is the 10 to ſtand ſtill, ſo ye ſee the 9 and 8 to haue already taken their diſtance, and the reſt of the *Files* to be moueing towards the *right hand* VY, till they haue all gotten their diſtance, required.

In *opening* of *Files* to the *left hand* ye muſt doe the contrare way, for yee make the *right hand File* ſtands ſtill, and the reſt to *open* towardes the *left* ſtil preſſing vpon the *left hand*, as the former did vpon the *right hand*, till they haue all gotten the diſtance commanded: and ſo both of them taketh vp the double of the boundes they ſtood in before.



A B C D is an opening of Files to the *left hand*, where the *right hand* File B D ſtands ſtill: The 2 and 3 haue already gottē their diſtance, the reſt are moving towards the *left hand* A C, till they alſo get their diſtance required.

Opening of *Files* to *both hands* is performed thus: The two *middlemoſt Files* preſſe vpon the *Flāks*, the one vpon the *right*, the other vpon the *left*, and take their diſtances and ſtandes, the reſt of the *Files* on both *Flanks* takes their diſtance from them, moving, the one halfe to the *right*, and the other to the *left hand*: till they haue all gotten their diſtance commanded.



EFGH is an *opening of Files* to *both hands*, where yee ſee the two *middlemoſt Files* to haue gotte their diſtance, the *fyft* hauing preſſed vpon the *right Flanke* FH: The *ſixt* vpon the *left* EG: the *files* next vnto them, the 4 vpon the *right Flanke*, and the 7. vpon the *left*, hath alſo taken their diſtance: The reſt are mouing vpon both *Flankes* till they likewiſe get their diſtance commanded, ſo that in this *Motion*, as in the other *openings*, the Battell ſhall poſſeſſe in length after it bee fully *opened* the double of the ground it had before the *opening*.

The words of Command for theſe *Motions*,

Files open to the right hand.
Files open to the left hand. } *To your open order, or any order elſe* }
Files open to the right and left

Or as ſome ſay *open both wayes*: and ſome onlie, *files open*: for when there is no nomination of any hand, it is vnderſtoode (as before in *cloſing*) an *opening* from the *middle*, to *both hands*.

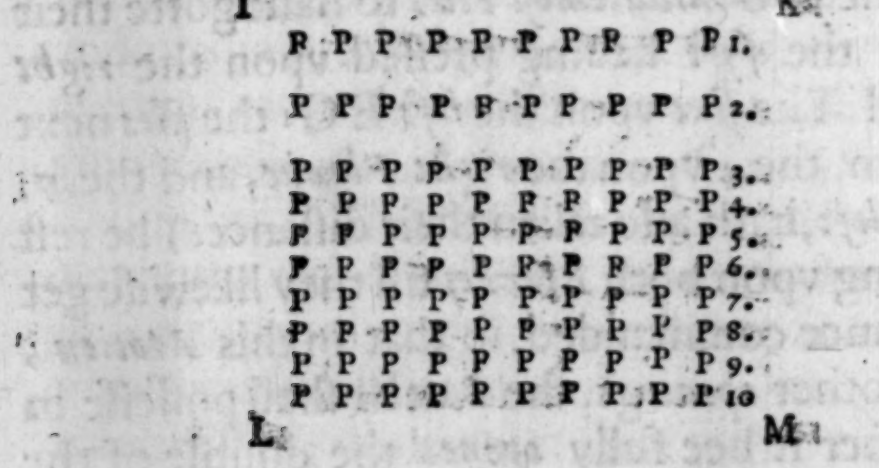
Our wordes of Command,

Open your Stringes to the right hand. } *To your first distance or any distance else.*

Open your Stringes to the left hand. } *To your first distance or any distance else.*

Open your Stringes.

OPening *of Rankes* is an *extenſion of the deapth of the* Battell *in place*, and is performed but one way, to witte, towardes the *Reare*, which is thus done: *The File-leaders*, or the *firſt Ranke* ſtandes ſtill, and the reſt of the *Rankes* falles backwardes towards the *Reare*, vntill the *ſecond Ranke* haue gotten its diſtance, which then ſtandes; the reſt of the *Rankes* moues ſtill backwardes, vntill they all haue gotten their diſtance commanded.



IKLM is an *Opening* of *Rankes* where yee ſee the 2 and 3. *Ranks* hath moued backwards, and hath alreadie taken their diſtance, and ye muſt conceiue the reſt of the *Rankes* to be mouing from the *Front* IK backwardes to the *Reare* LM vntill they all get their diſtance required.

The wordes of Command,

Rankes

Rankes open to your open order or any order elſe.

Our wordes of Command.

Open your Rankes to your firſt diſtance or any diſtance elſe,

Some vſe an *opening* of *Rankes* alſo *forwards* from the *Reare* to the *Front* if the ground permitte.

The *action* of theſe *Motions* of *opening* which I haue now ſhowne both of *Files* and *Rankes* by making the *Files* preſſe vpon their *Sydmen*, and the *Ranks* vpon their *Followers*, is according to our common moderne exerciſe, which differs much from the action of the Ancient (*e*) *Greeks*; for they in *opening Files* and *Rankes* did performe the *Motion* by *Facing*: but in my opinion our common forme is rather to bee followed: for although it want not its owne inconvenients beeing ſubject to ſtumbling on ſtobbs ſtones, or holes in the way; Yet in reſpect the *terminus ad quem* is not certaine nor ſeene as it was in *cloſing* of *Files* and *Rankes*: The *laſt Ranke*, or the vttermoſt *File* which beginneth the *Motion* of *opening*, ſhall never bee aſſured where to ſtand, or in what part to ſet themſelues, to giue a due competent ground to all the *Rankes* or *Files* to take their diſtance commanded; neither can the ſamine be diſcerned be the ey of the Commander: and therefore the *Motion* muſt bee begun, and the diſtance muſt firſt be takin from the *terminus à quo* which is ſeene and certaine: to wit, the *Ranke* or *File* that *ſtands* and ſo euerie one after other ſhall aſſuredly get their diſtance commanded, which they could not do behind their backs if they uſed a *Facing* but in this I ſubmit my ſelfe to the judgement of the more learned:

(*e*) *Ælian. Tact. c. 32.*

ned: For I think also that Souldiers may bee taught to take their distance by pacing.

Obserue that *closing* and *opening* both of *Files* and *Ranks* are one anothers *reducemẽts* as if ye *closed Files* to the *right hand*, and would reduce them to their first station, command them to *open* to the *left*; if ye *opened Files* to the *left hand*, to bring them as they were yee must *close Files* to the *right hand*; if yee *closed* to the *middle* open to the *right* and *left* by *division*: and so they are reduced, *& è contra*. Againe if yee *close ranks forwards open* them *backwards*, and so yee bring them as they were *& è contra*.

(f) Ælian. Tact. c. 28. (f) *Ælian* calleth an *opening* of *Files* or *Rankes* διπλασιασμος καταξυγα ἡ κατα βαθος τω τοπω *a doubling of the length* or *deapth in place*, which in my opinion is not fitly spokin, for although *Files* and *Rankes* bee *opened* to a greater distance yet the Battell cannot bee said to bee *doubled*.

(g) Supra Tit. 3. The use of *opening* and *closing* the *Battell* in *length* and *deapth* yee may finde (g) before, when I spoke of *distances* to the which I remitt you, for I will repeat nothing: only this, I adde that *Battells* are *opened* and *closed*, when a *Generall* will make his Armie appeare strong or weake according as hee mindes to terrifie or allure the enemie, *Files* are *closed* to the *right* or *left hand* when a troupe of Horse or Foote or Waggones with bagadge are to passe betwixt either of your *Flankes* and some strait: *Files are closed* to the *right* and *left* by *division* when yee will make a *streete* through your *Battell* for a *Generall* or some great *Commander* to passe.

Of

Tit. 10.

CONversion *or* Wheeling *is a Motion of the whole Battell towards the Flankes or* Reare, *changing the ground.*

And therefore *Wheeling* is two fold, the one when the Battell makes a *quarter turne* to the *right* or *left Flanke* which the Greeks calles ὀπιστροφὴ or *conuersion* the other when it makes an *halfe turne* to the Reare be the *right* or *left hand*, and this they call περιπασμὸς or *inflexion*: no other languadge except the Greeke doth expresse this *Motion* in two seuerall wordes.

Epistrophe, is described clearely by (a) *Ælian* ὅταν πυκνώσαντες τὸ συνταγμα, κατὰ παραστάτην, καὶ ὀπισάτην ὅλον τὸ συνταγμα ὡς ἑνὸς ἀνδρὸς σῶμα ἢ ὀπιδόρυ, ἢ ἐπ' ἀσπίδα κλινωμεν &c

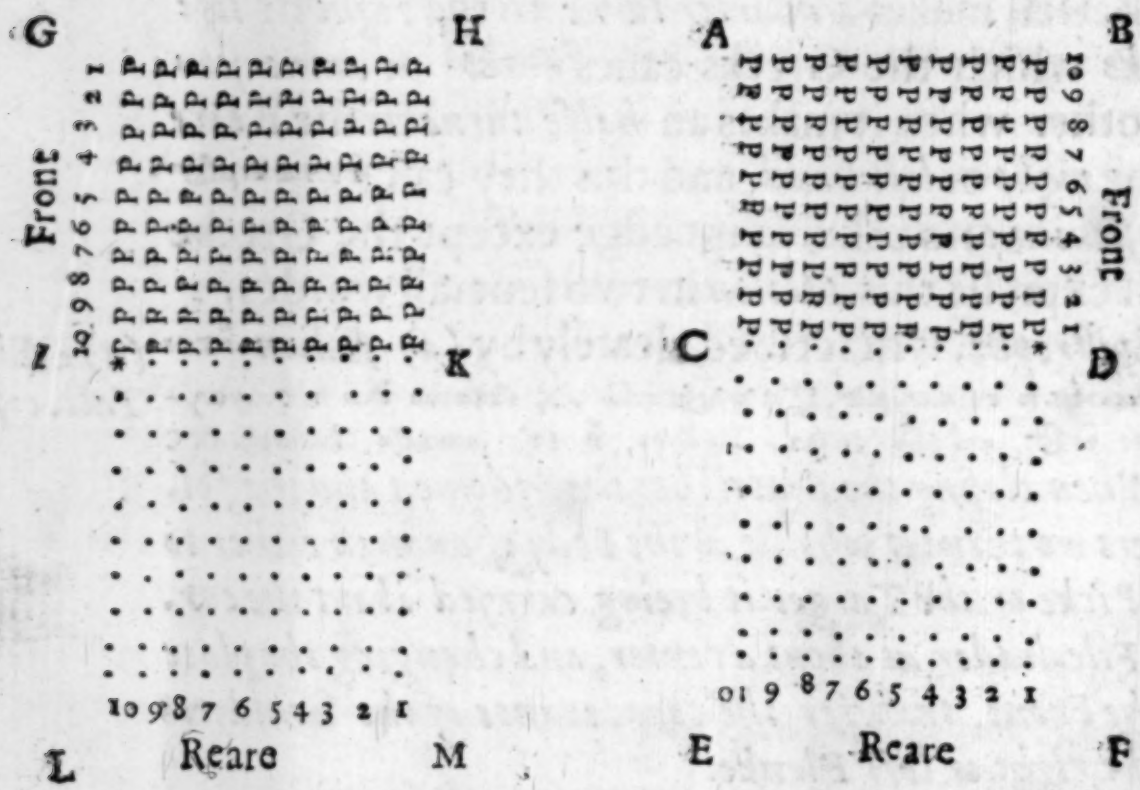
(a) *Ælian Tact. c. 24.*

When closing the Battell bee the Sydemen and the followers we turne it whollie as the Body of an man either to the Picke or the Target it beeing carryed about the corner File-leader as about a center, and changing the place of the Front, transfer the countenance of the Souldiers to the right or left Flanke.

(b) *Ælian* in an other place setteth it down more amplie, & it is thus to be performed: Ye must commād the *Files* to *close* to the *hand* to which ye mean to *Wheele* & the *Rankes* to *close* also *forwardes*: Then yee cause the *Corner File-leader* on the samine hand to *stand* still as the fixed foote of a compasse but moueing in his owne place, and all the rest keeping their *Files* and *Rankes closed* to turne to the samine hand joyntly about the *corner File-leader*, vntill the *Front* of your Battell be towards the *Flank* to which

(b) *Ælian. Tact. c. 31.*

yee *Wheele*, ſo that the *Front* of the Battell beeing *wheeled* falles like a *perpendicular line* vpon the *Front* of the Battell before it *Wheeled*, making a *right angle* of 90 degrees at the *corner File-leader* about whome they *Wheele*, and the *Flanke* falles vpon the *Front* as a *parallel* which the figure following ſhoweth.



The figure A B C D E F is An *Epiſtrophe* or *wheeling* to the *right hand*. C D E F is the Battell before the *Wheeling*, whereof C D is the *Front*, D F the *right hand* File: The Command beeing given, the *right hand File-leader* D who is thus marked * ſtands in his place, and the whole body turnes about him, vntill the *Front* of the Battell be in an evin line with the *right Flanke* of the former. The Battell after the *wheeling* is A B C D wherof B D is the *Front* D C the *right hand File*: B D falls as it were *perpendicular*

vpon

vpon the former *Front* C D, making the *angle* B D C a *right angle*, D C falles as it were *parallel* vnto the former *Front*.

The other figure is a *Wheeling* to the *left*, which by the former ye may easily vnderstand: for the *left hand File-leader*. I. hauing also this mark* stands still, and the whole Battell moues about him to the *left*, leauing the place they stood in I K L M and taking the place G H I K. The *Front* of the Battell before the *Wheeling* is I K, the *left hand File* I L: The *Front* after the *Wheeling* is G I: The *left hand File* I K, which is *parallel* vnto the former *Front*, and G I falls vpon I K, & maks the like *angle* as was in the former figure.

After yee haue made them *close Rankes*, and *Files*: The words of command for *Epistrophe*, are,

Wheele your Battell to the right hand.
Wheele your Battell to the left hand.

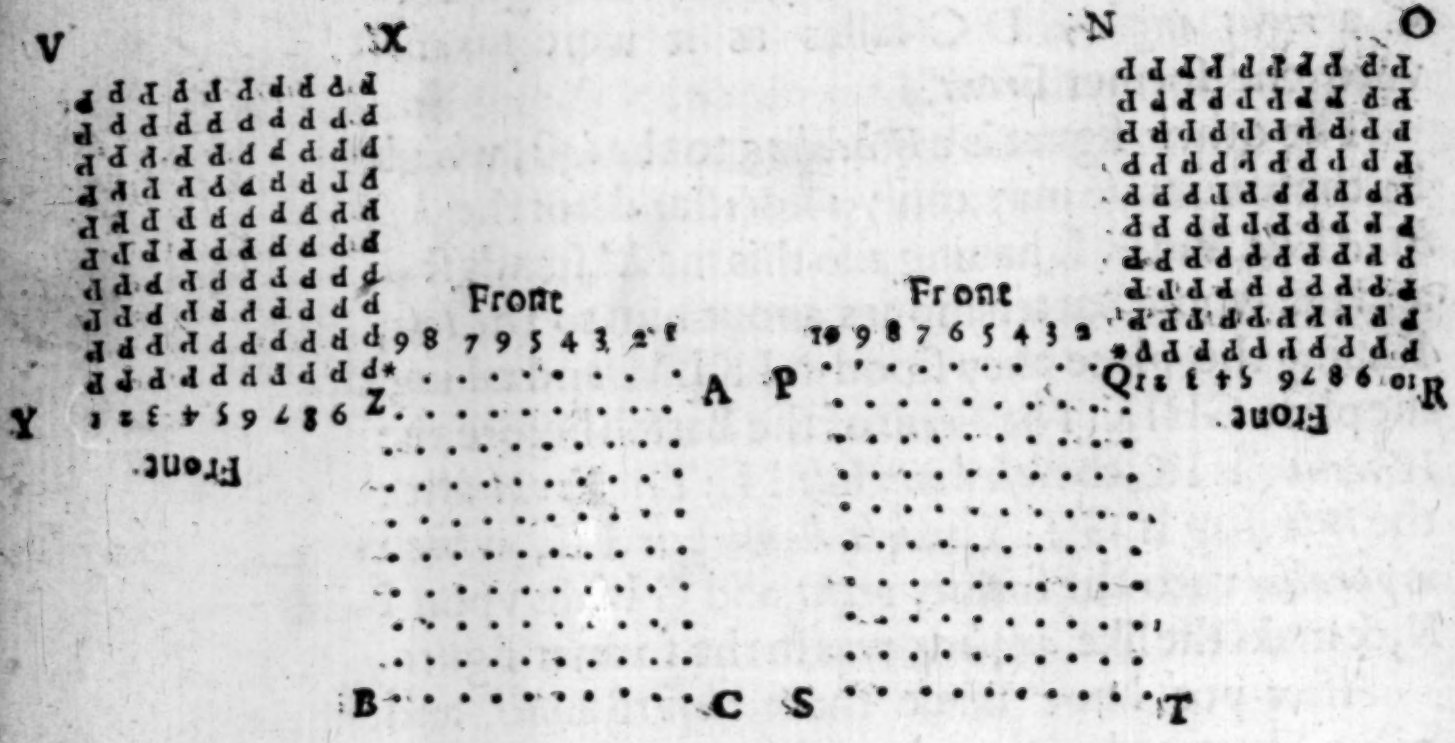
Our wordes of Command are,

The Great turne to the right about,
The Great turne to the left about.

Περισπασμος (saith (c) *Ælian*) εστιν, εκ δυσιν ἐπιστροφαιν του ταγματος κινησις, ωστε μεταλαμβανειν τον ὀπισω τοπον. Perispasmus *or* Wheeling about *is a Motion of the Battell in two Epistrophes or single Wheelinges, whereby the Front is brought in place of the* Reare.

(c) *Ælian. Tact. c.* 24.

In performing of the *Motion* yee must doe all as before in *Epistrophe*, except that your Battell must make an *halfe turne* towards the *Reare* to the *right* or *lefthand*, whereas before it made onlie an *quarter turne* to the *right* or *left hand*: So that *Epistrophe* brought the *Front* of the Battell to *either* of the *Flankes*, *Perispasmus* bringes the *Front* to the *Reare* as yee see in the figure following.



The figure N O P Q R is a *Periſpaſmus* or *Wheeling about* to the R*eare* by the *right hand* where the *left hand* *File leader* Q* .ſtãds ſtill, the reſt of the body moues about him an *halfe turne* vntill they bee all *faced* to the R*eare* and leaues the place they ſtoode in, P Q S T: and taks the place N O Q R, ſo that it falls vpon the other like an *quadrant* vpon an others *angle* the *right hand* *File leader* beeing the point of the *angle* to them both: the *Front* before the *wheeling* is P Q: the *right hand* *File* Q T: the *Front* after the *wheeling* Q R: the *right hand* *File* Q N which fals in a *right line* with the former Q T.

The other figure is a *Periſpaſmus* or *wheeling about* by the *left hand*, where the body moues about the *left hãd* *File leader* Z* to the *left* making an *halfe turne* till they be all *faced* to the *Reare*, and leaues the p'ace they ſtood in Z A B C & takes the place V X Y Z.

The

The *front* before the *wheeling* is Z A the *left hand File* Z B: the *Front* after the *wheeling* is Y Z, the *left hand File* Z X, which falles in a *right line* with Z B. Obserue that the *corner fileleaders* about whom the Battell is turned, either to the *flankes* or to the *Reare*, which I haue marked so*, are said to *stand still*, not in respect of *Motion*, but of altering of ground, for they doe also moue in their own place where they stand, not changing the ground, onely *facing* to the *hand* they *wheele*, but all the rest changes the ground and moues to the *Flanks* or the *Reare* as the Commād is.

The wordes of Command for *Perisspasmus*, after *closing* the Battell are,

VVheele your Battell to the right hand about,
VVheele your Battell to the left hand about.

Our words of Command are.

The great turne to the right round about.
The great turne to the left round about.

The *reducement* from a *wheeling* which the (d) *Greekes* calleth ἀναστροφὴ is thus performed. If ye made an ἀναστροφὴ or *quarter turne* to either *hand*, yee must first *face* them to the contrarie hand, and then *wheele* the Battell backe to the place it stood in before: and after they haue *faced* againe as they were, *Open Rankes* and *Files*, and so they shall bee brought to their first station, (many doe not use a *facing* in this *Reducement*): but if yee haue made a περιασμὸς or *halfe turne*, To reduce the Battel, ye must yet mak another *Perisspasmus* or *wheeling about* to the same hād, as if yee *wheeled about* to the *right hand*, yee must yet *wheele about* to the *right hand*: if yee *wheeled about* to the *left hand*, ye must yet *wheele about* to the *left*, and then *open* Rankes and *Files*, and so your

(d) Ælian. Tact. c. 24. & c. 31.

Battell ſhall bee *reduced* to its firſt Station.

Obſerue that the R*emoter* the Souldiers be from the F*ileleader* that *ſtands*, and the neerer they approach to the oppoſite *corner*, the ſwifter pace they muſt moue in *wheeling*, becauſe they mak an greater *arc* of an *Circle*, and therefore, hath more bounds to walke, for euerie R*anke* of the Battell in *wheeling* conſidderedas a R*hombe*, deſcribes an *quadrant* or *ſemi circle* according as the *wheeling* is to the *Flanks* or the *Reare* about the *corner* F*ileleader* as a *center*: And ye know that of many *Circles* deſcribed about one *center*, taking proportionable *arcs*, they ſhall be Unequall in bigneſſe, for the R*emoter* the *Circles* be from the *Center* the greater the *arcs* of them are, as yee ſee in the figure following.

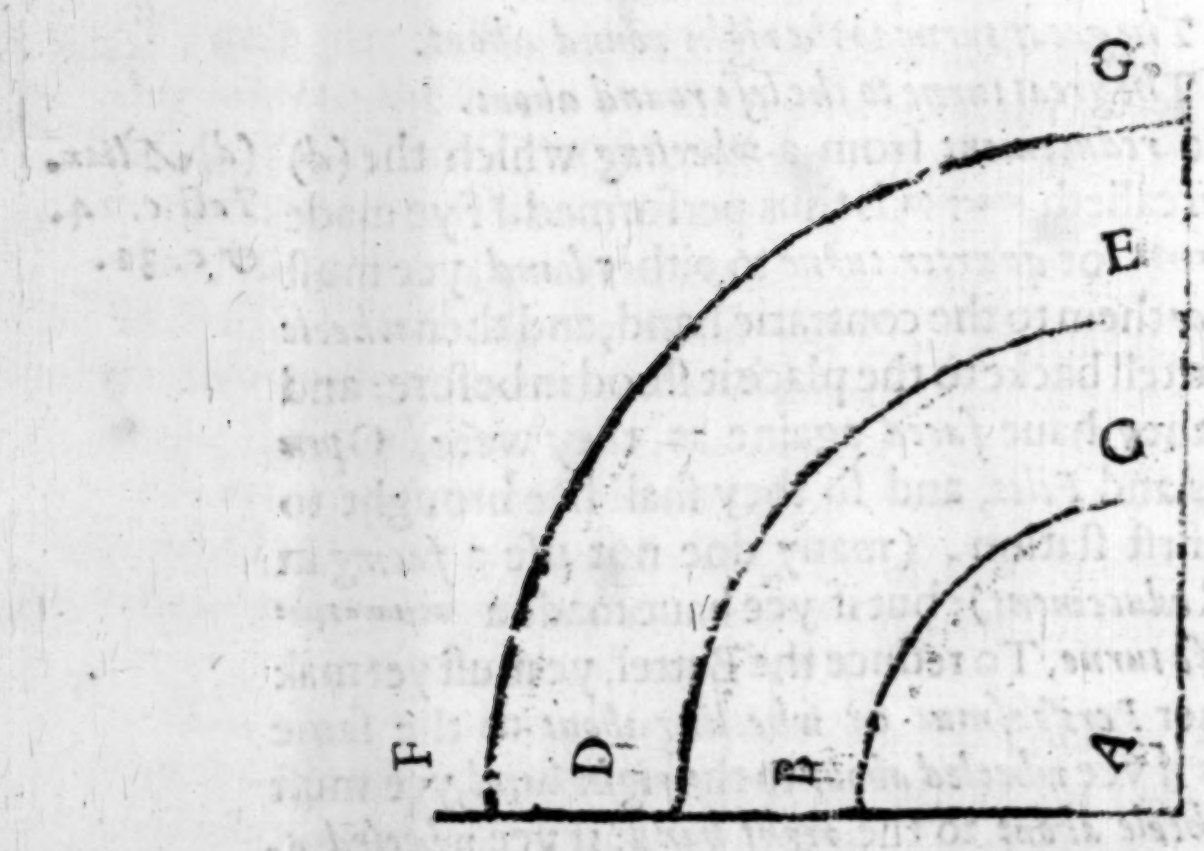


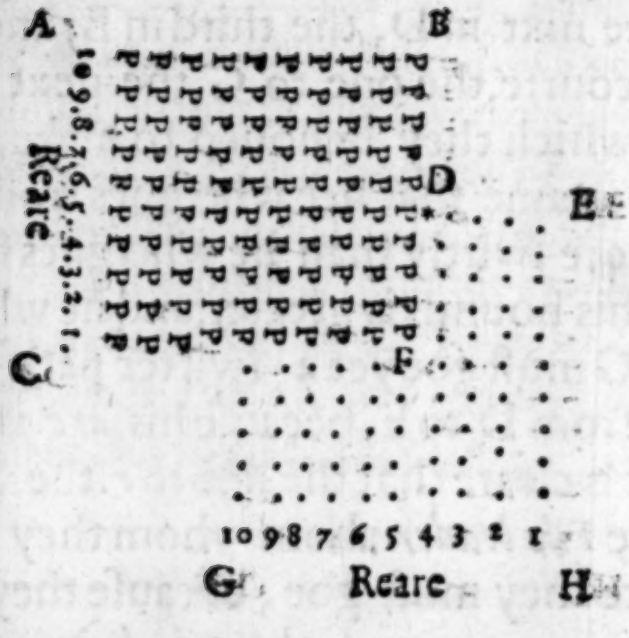
FIG.

F G and D E and B C are proportionable *arcs* of three *Circles* described about the *center* A, whereof yee see F G to bee the biggest, because it is remotest, & B C the least, because it is neareſt to the *center* A. Suppose then three men were placed, the one in F, the nixt in D, the third in B, and were to make their course, the one to G, the next to E, the third to C, which they behoued to make in equall time, it is certaine that hee who goes from D to E must goe more swiftly than he who goes from B to C, because his bounds is greater, and he who walkes from F to G must goe yet a swifter pace than hee who went from D to E, because his *arc* is geater.

Hence it is cleare that the *Remoter* the Souldiers are from the *File leader* about whom they turne, the swifter pace they must goe, because they describe the greater *arcs*, and the *File-bringer up* who is *Diagonallie* opposite to the *File-leader* that stands as *Center*, describes the greateſt *arc* of all: For lacke of this consideration, I haue seene much disorder in *wheeling* of a Battell.

There is another kinde of *VVheeling* used in the *Low-Countre* exercise: which is a *wheeling* by the *Center* to *either hand*, or to *either hand about*: It is thus performed: The *middle File-leader* of the *Flanke*, to which they *wheele* stands still, as the *Center*, all the reſt moues about him, the one halfe falling backward, the other halfe advancing foreward, according as the Command is to *wheele*: If the Command bee to the *right hand*, the *right Flanke middle File-leader* standes still, and all those of the *right Flanke* goeth backeward, the *left Flanke* forward: If to the *left hand*, the *left Flanke middle*

file leader ſtands, the *left* Flanke moues backeward, and the *right* forward, vntill they haue all made their *Quarter-turne*, or halfe *turne*, as the word is to *wheele* to the Flankes or the *Reare*.



This Figure is a *wheeling* of the Battell by the *Center*, to the *right hand*, where the *fift File leader* D* did ſtand as the *Center*, the body hath moued about him, the *right Flanke* F C falling backward; & the *left* Flanke A B advancing forward, vntill they haue left the place D E G H and taken the ground A B C F. D E is a part of the *Front* before the *wheeling* E H the *right Flanke*. B F is the *Front* after the *wheeling*, F C the *right Flank*: the number of the *Files* are ſet downe in the *Reare* of both the figures, becauſe I had no place to ſet them in the *Front*, for the interſection of the two *Fronts*.

By this yee may alſo eaſilie conceiue a *wheeling* to the *left*, for making the *ſixt file leader* to ſtand, & the *right* Flanke F C to moue forward, and the *left*

Flanke

Flanke B A to fall backward and make *a quarter turne*, vntill the *Front* B F ſhall be *converted* to the *left hand*. Likewiſe yee may conſider a *wheeling* to the *right* or *left about*, if yee cauſe the Bodie make an *halfe turne* to either hand, vntill the *Front* bee towardes the *Reare*, ſo that B F ſhall fall *parallel* vnto the former *Front*, whereas now it cuttes it *perpendicularlie*.

The wordes of Command for this *Motion*.

VVheele your Battell by the Center to the right hand.
VVheele your Battell by the Center to the left hand.
VVheele your Battell by the Center to the right or to the left hand about.

This *VVheeling* doeth not alter the ground ſo much as the other *wheelings*.

The vſe of this *Motion*, is when the Enemie comes to aſſault you in any one place, as on either of the *Flankes*, or the *Reare*, ye turne the *Front* of your Battell towardes him, and ſo bringes your beſt men to fight with him, which Good Commanders was alwayes accuſtomed to doe, as I ſhew before; But if he come to charge you on more places then one, as in the *Flankes* and the *Reare*, or in the *Front* and the *Reare*, or in the *Front* and the *Flankes*, *VVheeling* will doe you no good: your onelie remeade will bee to *face about*, and receiue his *Charge*: By this *Motion* (e) *Pyrrhus* ouerthrew *Arieius* King of *Lacedemon*, and (f) *Amilcar* defeate *Spendius* with the reſt of his Rebelles: See the Hiſtories, For I will not burding this ſmall Treatiſe with many *Allegations*.

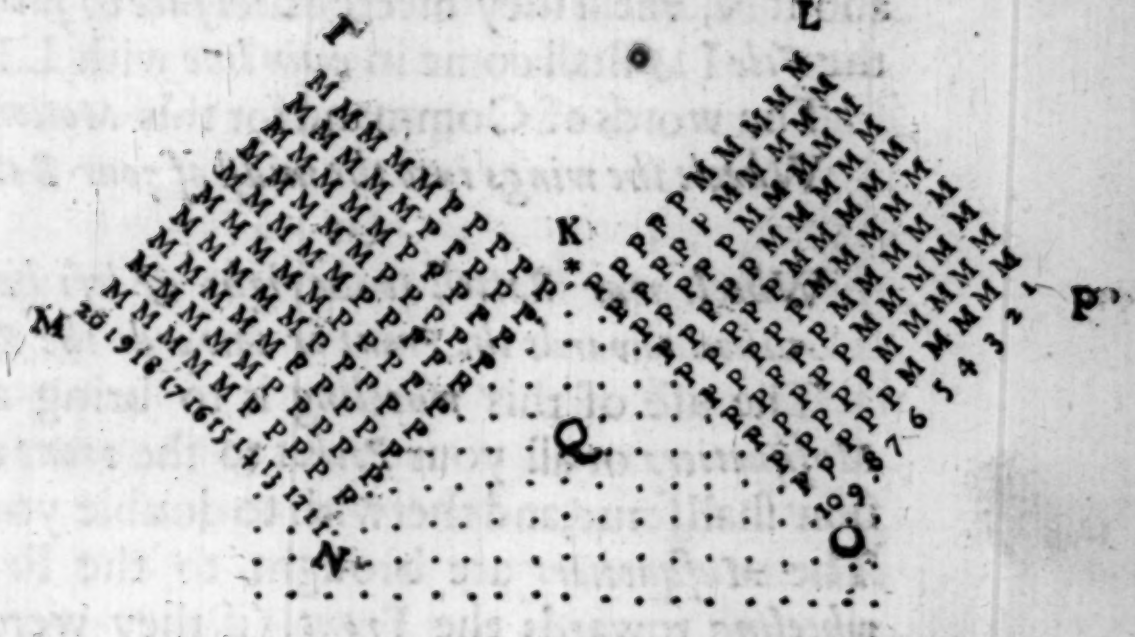
The vſe of VVheeling

(e) *Plutar. in Pyrrho.*
(f) *Polyb. Hiſt. lib. 1. Sect. 21.*

Obſerue that *Epiſtrophe* and *Periſpaſmus* are in the whole Battell, the ſame which *Cliſis* and *Metabole*

was in a particular Souldier, for as thir turnes the *face* of the Souldier to the *Flanks* or the *Reare*, keeping ſtill his place, ſo doeth the others turne the *Face* or *Front* of the whole Battell to the *Flankes* or the *Reare*, changing the ground.

There is another kind of *Wheeling* which is when the *winges* are *wheeled* into the Bodie: &this is done either towardes the *Front* or towardes the *Reare*, If towardes the *Front*, then yee command the *middle File leaders* to ſtand ſtill (I meane from changing of ground not from *Motion*, for they moue in their owne place) and the *right wing* to *wheele* forwards to the *left*, about its owne *middle Fileleader*, tranſferring their faces to the contrarie *wing*: The *left wing* in the ſame time *wheeles forward* to the *right*, about the other *middle Fileleader*, meeting the other *wing* in the midſt *face* to *face*: Then the *Commander* bids the *right wing face* to the *right hand*, and the *left wing* to the *left hand*, & ſo they ſhall all haue their aſpect towards the *Front*, If the *wheeling* be towards the *Reare*, ye muſt firſt *face* your Battell about by either hand, then the *bringersup* of the *middle Files* who are now become *leaders* ſtands ſtill & both the *wings* ſhall moue about the *Bringersup*, the one to the *right hand*, the other to the *left*, till they meete other in the midſt as did the former: then the *Commander* may bring their aſpect to the *Front* or the *Reare* as hee pleaſes.



This figure is a *Wheling* of the *wings* into the midst of the Battell towards the *Front*, where ye see the *right wing* K L O P to bee *wheeling* to the *left hand* about the *middle Fileleader* K* & the *left wing* I K M N to be *wheeling* to the *right*, about its own *middle Fileleader*, marked also K*, and ye must conceiue those two *wings* to moue still on, vntill they meete other, the *Pickes* joyning with the *Pickes* and the *Musquetiers* with the *Musquetiers*, and then the *left hand File* of the *left wing* I M shall come in *evin line* with the *right hand File* of the *right wing* L P making thereof the *Front* of the Battell after they are *turned*, and the *File* K N shall come in an *evin line* with K O making thereof the *Reare*. N Q O is a parte of the ground where the Battell stoode before it began to *wheele*. But if yee *wheele* your Battell towards the *Reare* ye must conceiue N and O to be joyned & to stand still, and the *right wing*

after it is *faced about*, to *wheele* to the *right hand* about O, & the *left wing* to *wheele* to the *left hand* about N, vntill they meete other *face* to *face*, ſo that the *File* I M ſhall come in *e vin line* with L P.

The words of Command for this *Motion* are

Wheele the wings into the midſt of your Battell

Or

Wheele your Battell to the right & left hand by diviſion towards the Front or towards the Reare.

The uſe of this *wheeling* is to bring all your *Muſquetiers* or all your *Pickes* to the *Front* as occaſion ſhall ſerue, and therwith to double your *Front*: The *Muſquetiers* are brought to the *Front*, by *wheeling* towards the *Front*, (if they were before on the *Flankes*.) The *Pickes* are brought to the *Front*, by *wheeling* towardes the *Reare* (if they were before in the *middle*): Suppoſe then that an troupe of the enemies horſe were comming to *charge* your *Front*, or your *Reare*, minding alſo to encompaſſe your *winges*, by this *wheeling* of the *winges* into the *mideſt* of your Battell, with one labour yee both bring your *Pickes* againſt the Enemies horſe, and doubles the length of your Battell to eſchew *overwinging*.

This *wheeling* hath onely a *quarterturne*, but if yee will make an *halfe turne* either to the *Front* or the *Reare*, yee ſhall bring the *Pickes* to both *Flankes*, if they were before in the *mids*: as in the former figure, if yee ſhould make an *halfe turne*, the *Files* K O and K N ſhall come to bee the *Flankes* of the Battell, and I M and L P ſhall joyne in the *middle*.

This is of good uſe againſt troupes of *horſe* comming to *charge* both your *Flankes*, for the *Pickes* may

may withstand the *charge* of the *horse*, and the *Musquetiers* play vpon them from the *middle*.

The wordes of Command.

Whele your Battell to the right and left hand about by division.

If ye wold *reduce* any of those to their first *station*, ye haue nothing to doe, but to *face* to the *contrarie hand* and to *wheele* your Battell back the contrary way *quarter turne* or *halfe turne* as they *wheeled* first, and then they *face* as they were.

(g) *Ælian* describeth an *triple wheeling* which he calleth τριπλασιασμος, but I thinke it is an superfluous and foolish *Motion*, neither can I beleiue that ever the *Greeks* did use it, for to what effect shall ye make an τριπλασιασμος or *triple wheeling* of your Battell to the *Picke* or the *Target*, when a *single wheeling*, or *quarter turne* to the contrary hand will effect the samine with greater readinesse, and thrise also little paines and time? as for example, if you make an τριπλασιασμος to the *Target*, that is, if yee *wheeled* your Battell thrise to the *left hand*, yee bring the *Front* of it to the *right Flanke* against the enemie; now if you make but one ἁπλασιασμος or *single wheeling* to the *right hand*, yee doe the same thing, and I think there is no man of sense but will accorde that it is superfluitie, to use *three turnes* when *one turne* will doe the businesse, and chiefly in affaires of *warre* where the lest moment of time doth carrie with it a great weight: This I thought good to advertise anie who shall read this *Motion* in *Ælian* that hee may eschew it, for it is not only against our moderne excercise, but contrarie to sense and reason.

(g) *Ælian. Tact. c.* 24. *& cap.* 31.

Of the particular exercising of *Picke-men* and *Muſquetiers*.

Tit. 11.

OVr *Pickemen* (as I ſhew before) repreſents the *heauie armed*, our *Muſquetiers* the *light armed*, both of the *Grecian Phalanges*, and the *Roman Legions*.

Their *heauie armed*, did carie for defence: a *Target*, beſides the compleat arming of the bodie: but whether the Diſcipline of our time hath done well or not, in laying aſide the *Target* from our *Pickemen*, I will not diſput, becauſe it is thought heauie and vnwealdie for an armed man, and verie noyſome in a *March*, yet I thinke that cuſtome and exerciſe would alleviat thoſe difficulties, and I belieue no good *Commander* will deny, but it were expedient that ſtronge able men beeing *File-leaders* of euerie *Battaillon*, were appointed to carie large Targets of proofe, after the *Macedonian* faſhion, that vnder the ſhaddow of them, the reſt of the *Battaillion* might be ſheltered from the ſhot of the Enimie, and alſo the *Battaillion* might be kept ſtrong againſt the *charge* of the Enemie, minding to breake it, as the *Greckes* did, when they made their σωματοειδη which did mightilie aſtoniſh the *Romans* themſelues when they had adoe with them, for (*a*) *Conſul Lucius Æmilius ſæpe apud Romanos confitebatur ſe nihil unquam vidiſſe terribilius Phalange Macedonicâ.*

(*a*) *Plutar. in Emilio. Suidas in* φαλαγξ.

Now as for the particular exerciſe of the *Pickemen* alone, there is no other, but that they ought exactlie to doe their *Poſtures* ſhown (*b*) before (the

(*b*) *Supra Tit.* 5.

Mo-

Motions which I haue hitherto deſcribed, beeing alike competent to them & the *Muſquetiers*) for ordinarlie the *pickemen* in time of *fight* or *ſkirmiſh* doeth nothing vntill the *Battells* come neare to *puſh* of *picke*, and then onelie they *charge* their *pickes* againſt the Enemie, for the burding of ſuſtaining the fight before that, lyes vpon the *Muſquetiers* of both ſides, during which time the *Pickemen* ſtands as idle ſpectators, ſeruing onelie as a prop for the Enemies ſhot, and neuer beeing able to offend them, which is a pitifull conſideration.

To remead this inconvenient, the Gentlemen Souldiers of the trained bandes of the *Artillerie Garding* of *London* doe practiſe a ſhooting with the *Bow* they who are *Pickemen*, without anie diſturbance or hinderance of the uſe of their *picke*, which is thus done:

They haue a *Bow* tyed to the *picke* in that place where they *ſhoulder* by a little engine or vice, about which it turneth as they liſt, ſo that plāting the *But-end* of the *picke* on the ground, againſt the *right foote*, and holding the *Bow* with their *left arme*, the *picke ſloped*, and beeing as it were a *reſt* vnto the *Bow*, they ſhoote off their volie of Arrowes (which hang in a Cace at their Girdle behind their backe) with great eaſe & dexterity, if they be exerciſed therwith: & therafter they may *faſten their Bow* to a little pinne, and *recouer their picke*, *order*, *aduance*, *ſhoulder*, or doe anie other *poſture* commanded as well with the *Bow* as without it: When the whole Battell ſhoottes, the *followers* muſt ſhoote throw their owne *File* ouer their *Leaders* heade: & they muſt ſtand in *order* at the leaſt. But when the Enemie commeth neare hand to *charge*, the firſt fiue *rankes*

muſt *cloſe* to their *cloſe order*: and if it bee againſt *horſe*, while they *foote* their *Pickes* to receiue the *charge* and haue their swords drawne, the laſt fiue *Rankes* may ſhoote their volies of *arroues*, and doe great execution againſt them, whereas without their *Bowes* they can doe nothing but ſtand with their *pickes* ported.

The wordes of Command for the uſe of the *Bow* with the *Picke* are thoſe.

Order your picke.
Slope your picke.
Vnfaſten your Bow.
Draw out your Arrow.
Noke your Arrow.
Shoote whollie together.
Recover your picke.
Faſten your Bow.
Advance your Picke.

This weapen is of excellent uſe both againſt the Enemies *foote* and *his horſe*: as for the *foote* it ouerthroweth cleane the *Muſquetiers*, ſeeing they are vnarmed, & the *pickmens* face, armes, and legges are alſo ſubject to the wounds of the *Arrow*, which partes being hurt, maketh them vnable for ſeruice: but it doth eſpeciallie gall the *horſe*; for a *horſe* beeing wounded and hauing an hooked Arrowe fixed in his fleſh hee will ſo rampage and runne to and fro, that hee ſhall diſorder the whole Battell: They ſerue alſo to ſhoote fireworks into the Enemies *Trench* or *Fort*, and alſo are ſteadable for *conuoyes*, who oft-times are aſſallied by horſe.

But yee will ſay, that thoſe onelie of the *firſt Rankes* can uſe this *Bow*, and that it cannot bee handled by them of the *middle* and *Reare* of the

Battell

Battell, for they will harme their owne *Leaders*: To cleare this, I would ask you, How did the γυμνητες or *light armed* of the *Grecians* anie seruice, beeing placed in the *Reare* of their *phalanx*, or the *Roman Velites* in the *Reare* of their *Maniples*? for they were sundrie times so ordered as yee may see in (c) *Ælian* and (d) *Leo*: and also beeing placed in the middle of the Battell, or in the μεταιχμιον described by (e) *Ælian*, or yet being inserted betweene the *Files* of the armed men, as in the (f) συνταξις, how could the *light armed*, I say, and chiefelie *Archers*, doe anie seruice? how could they doe any harme to their Enemies without endamnadging their own *Phalanx*, or *Maniples*? The doubt is alike, and yet the Auncients many times were accustomed to use this forme of *Embattelling*: There is no question then, but our *Pickmen* with their *Bowes* may doe the same execution, as did the γυμνητες or *velites*, yea in this respect they haue a great advantage aboue their *Archers*, seeing they had to shoote their *Arrowes* ouer the heades of *16* deepe attour the deapth of their own Bodie: but the *last Rankes* of your *Pickemen* hath to shoote ouer the heade of 9. deepe onelie: Alwayes, yee shall consider, that the Enemie must be at a farre distance, when the whole Battell shootes off; otherwayes, when hee comes nigh to *charge* (as seldome hee will doe, if this weapon bee rightlie used) they must shoote a straight shoote, and then the last R*ankes* can hardlie let flee their *Arrowes*, except the first *rankes charge* at *foote*, as I said: in which case the first R*ankes recouers* their *picks*, *fastens their Bows*, commeth vp to *close order*, & *chargeth their pickes* against the Enemie, the last R*ankes*

(c) *Ælian Tact. c. 7. & 15.*
(d) *Leo. Tact. c. 14. § 69.*
(e) *Ælian Tact. c. 48.*
(f) *Ælian. Tact. c. 30.*

ſtanding ſtill at their ſhooting *Poſture.*

VVherein the Bow excelles the Muſquet.

This *Bow* is verie ſteadable in warlike ſervice, and although the uſe thereof is almoſt quite extinguiſhed by the furious execution, which the *Muſquet* appeareth to make, yet I will proue it to ſurpaſſe the *Muſquet* in manie reſpects: firſt in *ſureneſſe* becauſe an *archer* cannot miſſe to nock his arrow, and to ſhoote off, but an *Muſquetier* may fail of his ſhot, by ſundrie accidentes, as by rolling out of the *bullet*, by an *badde matche*, an *matche* not right *cocked*, by euill *powlder*, or wet *powder* in his *Pan*, and ſuche like: and I haue oftentimes ſeene an *Ranke* of *Muſquetiers* hauing *preſented* and *given fyre*, that three or foure often hath failed of their ſhot & ye muſt know that in ſervice there is no time to *prime againe*, or to *right* their *matche*, for they muſt *fall away* with the reſt of their *Ranke* and make place to the next *Ranke* to *gine fire*. Againe it ſurpaſſes the *Muſquet* in *readineſſe*, for an *Archer* ſhall ſhoote ſixe arrowes at the leaſt, before a *Muſquetier* haue *diſmounted his Muſquet*; *Vncocked his matche*, *Blowne his Pan*, *primed*, *ſhoote his Pan*, *caſt off his looſe Powlder*, *caſt about his Muſquet*, *charged*, *drawne out his ſcourer*, *ſhortened his ſcourer*, & done all the reſt of the Poſturs which are requiſite for the right uſing of the *Muſquet*: Alſo the *Muſquet*, as all fierie wapons, is dangerous to them who are *Vnſkilfull*, for an unexpert man may ſpoile himſelfe and many about him, which inconvenient is not ſubject to the *Bow*. Laſtlie, it excelleth the *Muſquet* in execution and pluralitie of vollies, for an whole Batallion of *Archers* or *Pickmen*, with their *Bowes* may ſhoot off all together, wher-

as

as one *Rank* only of *Musquetiers* can *giue fire* at once, vnlesse the rest would either shoote at *random*, or else kill their *leaders*, so that in an *Battallion* of 200 men, halfe *Picks*, halfe *Musquetiers*, the *Pickmen* shall shoote 100 arrowes for 10 shot of *Musquet*: wherfore so manie flights of 100 arrowes following suddenly, and continually after others, vpon the enemies *Battallion* shall assuredly so terrifie and disorder them, that they shall bee forced rather to saue themselves by flight, than either follow or a abide the *charge*.

Of what esteeme the *Bow* was in ancient tymes and how serviceable in warres, (*g*) *Vegetius* citeth the Bookes of *Cato de disciplinâ militari*, and showeth the example of *Claudius* and *Scipio Africanus*, who by this weapon ouercame their enemies, whome otherwise they could not haue matched. His wordes ar those. *Quãtum autem utilitatis boni sagittarij in preliis habeant, &* Cato *in libris de disciplinâ militari evidenter ostendit; &* Claudius *pluribus jaculatoribus ante institutis atque perdoctis hostem cui prius impar fuerat superavit: Africanus quidem* Scipio *cum adversum* Numantinos, *qui exercitum populi* Romani *sub jugum miserãt, esset acie certaturus, aliter superiorem se futurum esse non credidit, nisi in omnibus centuriis lectos sagitarios miscuisset.* The Emperour (*h*) *Leo* after hee hath giuen Command to renew the practise of Archerie hee subjuneth ἢ γὰρ τουτου κεφαλαιου (meaning τοξειας) αμελεια πολλην βλαβην καὶ αμελειαν τω καθολου Ρωμαικω στρατευματι ενεποιησεν. *for the neglect of Archerie hath brought great skaith and damnage to the* Roman *armie*: and it is certaine that by this weapon the (*i*) *Gothes* did subdue the *Romans* & ex-

(*g*) *Veget. de re milit. lib.* 1. *c.* 15.

(*h*) *Leo. Tact. c.* 11. *Vltimo.*

(*i*) *Veget. de re milit. lib.* 1. *cap.* 20.

ſtirpat their Empire. By this weapon in leate times the *Engliſh* did euer ouerthrow the *French cavallery*, & therby obtained many great and famous victories, as thoſe of *Creſſi*, *Poictiers*, *agin-court*, and others.

The Souldiers of the militarie yarde at *London* are taught to uſe a *Muſqueton* or *demy Muſquet*, with their *Pick*, which hangs about their Neck in a Bele like a *carabine*, beeing two foot in length, and of full *Muſquet* bore 12. bullets to a pound, but hauing a *ſnapwork*, it wil carie blanck as far as a *Muſquet* which I haue ſene: This *demy Muſquet* they *charge* and *diſcharge* with as great facilitie, as if they had nothing to uſe but their peace: making their *Picks* as it were a *reſt* vnto it: but the uſe heereof cannot be ſo well vnderſtoode by diſcourſe as by practiſe, Yet it is certaine that the firſt or laſt two *Ranks* only can haue the benefite of this weapon, whereas the whole Battell of *Pickmen* may ſhoote off their Arrowes altogether.

And thus much for the exerciſing of *Pickmen* with a *Bow* or *halfe Muſquet*, wherein I haue inſiſted longer then I intended, becauſe the matter is worthie of imitation; for it hath oftentimes grieved my minde that the choiſeſt men in the Battell ſhould patiently ſtand as a marke to the enemies ſhotte, and thereby fall to the ground before they come to hands.

OF the exerciſing of Muſquetiers.

This exerciſe of *Pickemen* with the *Bow* and *halfe Muſquet*, I haue not elſe whereſeene except in the fornamed places, but the exerciſing of *Muſquetiers* is ordinarie euerie-where.

The *Muſquetiers* moſt commonlie are placed in

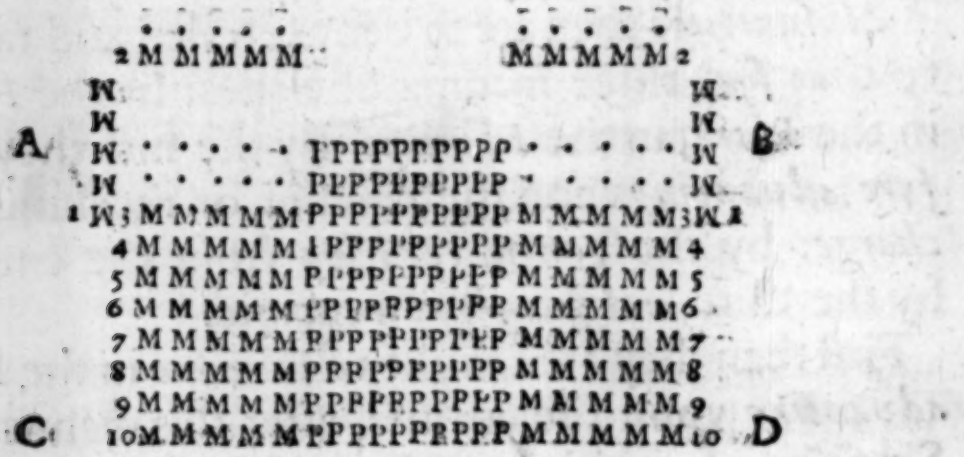
in the *Flankes* of the Battell, although vpon occasion the Commander sometimes will place them in the *Front*, sometimes in the *Reare*, sometimes make *plottons* of them or *troupes* of *reserue*.

Musquetiers then are to bee exercised and taught to *Giue fyre* three manner of wayes: In the *Front*, in the *Reare*, in the *Flankes*: By the first they *giue fyre advancing* vpon the enemie, or receiuing his *charge*: by the second *reteiring* from the enemie: by the third *marching* by an enemie.

How to Giue fire in the Front.

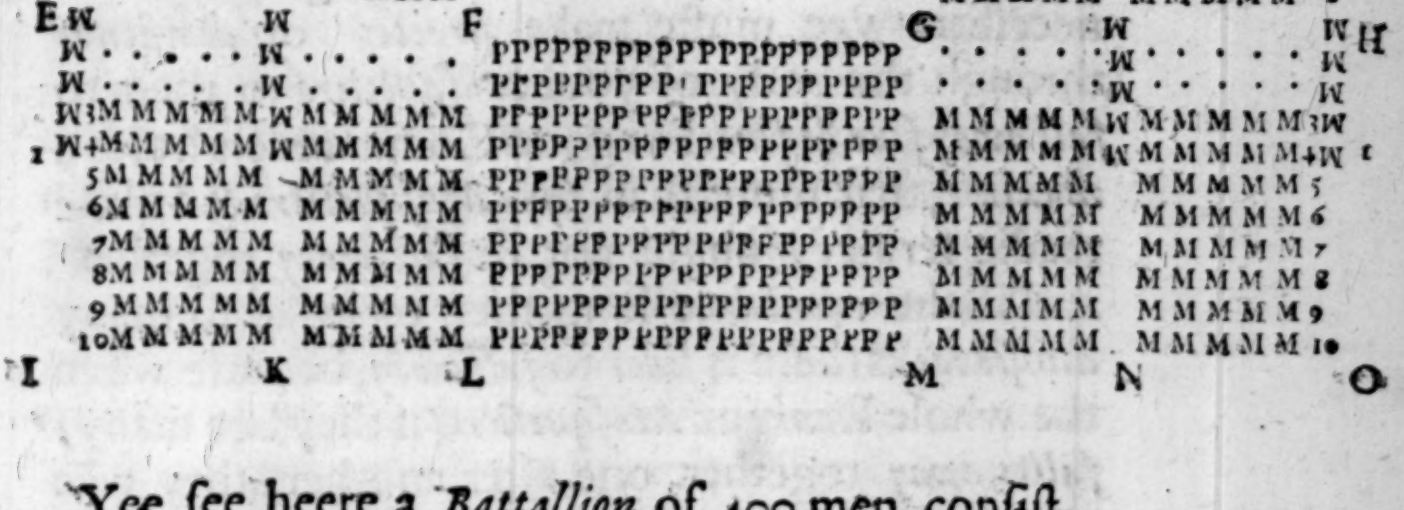
First then they are taught to *Giue fire* in the *Front advancing* vpon the enemie, after this manner: A Sergeãt or some higher Officer if the body be great stands some 7 or 8 pace before the body & commãds the first two R*ankes* of *both winges* to *make readie*, and to *come vp* to him: which when they haue done hee commands the *first* R*anke* to *present* and *giue fire*, and thereafter to *fall away*, those of the *right Flanke* to the *right hand*, those of the *left Flanke* to the *left hand*, that is: to *marche away* one after another in a *File* downe by the *Flankes* of the *Battallion* and joyne in the *Reare* euerie man behinde his owne *File*. When the *first Rank* is *fallen away*, the second *presentes* and *giues fire*, and *falles away*, as the first: Immediatly as the first two R*anks* doth moue to goe up, and *giue fire*, the next two R*ankes* must *make ready*, and as soone as the first two *Rankes* are *fallen away*, they goe vp to their place and *giues fire*, and *falles away* in the like maner as they did: So all the other *Ranks* by twoes are to doe the samine, one after another, vntill they haue all *giuen fire*: when the first two R*ankes* are *advanced*, the body moues vp to their place,

and the rest successively till the whole *Rankes* haue *giuen fire*, and made way for the *first* Ranke to renew the *volie*.



Yee see in this Battell A B C D the first two *Rankes* of each wing are *aduanced* before the body to *giue fire*, and the first Ranke of *both winges* hath alreadie *giuen fire*, and *fallen away*, That of the *right wing* B D to the *right hand*, that of the *left wing* A C to the *left hand*, and both of them falleth downe to the Reare, euerie man behinde his owne *File:* The second Ranke of *both winges* hath *presented* to *giue fire*, and thereafter *falles away* as the first did. and so all the rest.

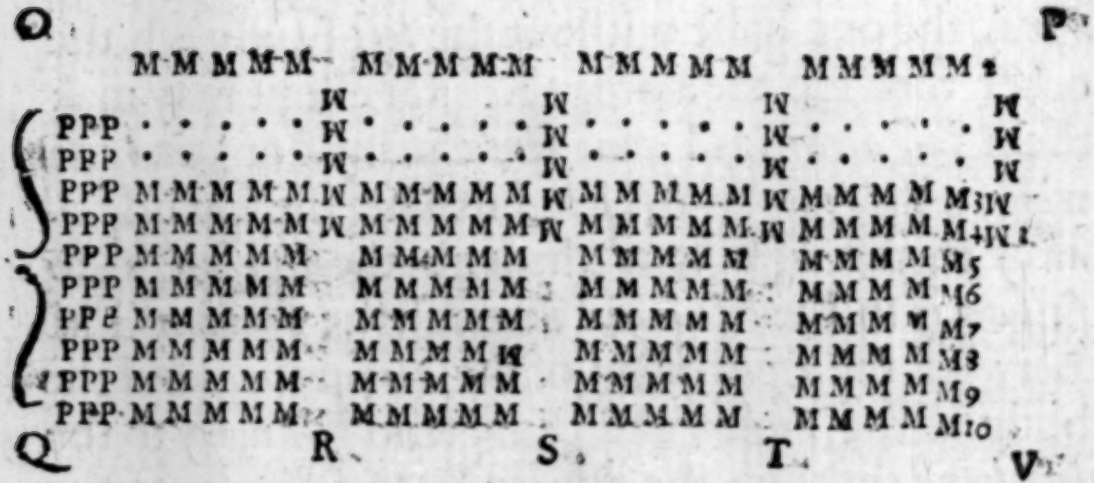
But if your *Battallion* cõsist of any greater number as of 400 or 600 men, so that ye haue 10 or 15 *Musquetiers* in *Ranke* on each *wing*, then yee must obserue to mak them *fall away* by *diuisions*, that is, they must divide themselues and *fall away* downe by the *diuisions* or *streetes*, which the *Sergeant* causes make to that purpose through the bodie of the *Musquetiers*, those of the *right wing* falling to the *right hand*, those of the *left wing* falling to the *left hand*.



Yee ſee heere a *Battallion* of 400 men, conſiſting of halfe *Picks* halfe *Muſquetiers*, hauing 10 *Muſquetiers* in R*anke* on *each wing*: The *right wing* is GHMO, The *left wing* EFIL: The *firſt Rank* of *both wings* hath *given fyre*, & *fallen away*, That of the *right wing* to the *right hand*, the one halfe without the *right Flanke* HO, the other halfe through the *diuiſion* N, That of the *left wing* to the *left hand*, the one halfe without the *left* F*lanke* EI, the other through the *diuiſion* K. Or elſe ye may mak them *fall away* (as I hane ſeene many doe) on each *wing* to the *right* or *left hand*, making thoſe who *fell away* to the *right hand* through the *diviſion* N, to *fall away* to the *left hand* through the *diuiſion* G M betwixt the *right wing* of the *Muſquetiers* and the body of the *Pickes*, and thoſe who *fell away* to the *left hand* through the *diviſion* K, to *fall away* to the *right hand* through the *diviſion* F L, betwixt the *left wing* of the *Muſquetiers* and the body of the *Pickes*, and by this meanes yee ſhall keep the body of your *ſhotte* whole and vndiſioyned, which many Commanders ſtudie to doe.

But if your *Battaillion* be greater, as conſiſting of

600 or 800 men, ſo that yee haue 15 or 20 *Muſquetiers* in R*anke* on each *VVinge*, then of neceſſitie yee muſte make *ſtreetes* or *diuiſiones* through the body of your *Muſquetiers* to them to *fall away fiue* & *fiue*: For good Comm anders holds a *maxime*, that more than *fyue Muſquetiers* (to make readie ſeruice), ought not to *fall away* together, and if the *Front* bee long, then to make ſo many *diuiſiones* as there is *fiues* to *fall away*, becauſe when the whole R*anke* of *Muſquetiers* (if they bee many) *falles away* together, one after another, they take a long time before they can all *fall away*, and ſo hinders the next R*anke* to come vp and *giue fire*, whereas *falling away* by *diuiſions*, they doe it in an inſtant, and makes preſent way for the next R*anke* to *giue fire*, as yee ſee in the figure following.



O P Q V is the right *wing*, of a Battell of 800. men, containing 200. *Muſquetiers*, making 20 in *Front*: yee ſee then the firſt *Ranke* O P hath *giuen fire*, and *diuided* it ſelfe in foure partes, containing euerie one *fyue*, *falling* all away to the *right hand*, whereof the one is *falling away* by the *right Flanke*

P V, the next through the *diuiſion* T, the third through the *diuiſion* S, the fourth through the *diuiſion* R: So that the whole twentie *Muſquetiers falleth away* in as ſhort time, as *fiue* onelie would haue done: whereas if they had *fallen away* altogether to either *hand*, they would haue taken foure times as much time, or had fallen away to the *right* and *left*, they would haue taken twiſe ſo much time as they haue now takē in *falling away* by *diuiſions*, & therfore makes ready way to the following R*ankes* to come vp & *giue fyre* againſt the Enemie: The like ye may vnderſtand of the *left wing* of *Muſquetiers*, where they will all fall to the *left hand* as theſe hath done to the *right*: This forme of *falling away*, I haue found approued, and haue ſeene practiſed by the moſt iudicious and beſt experimented Commanders of our dayes: Notwithſtanding, I know many Commanders, who not conſidering this, make all their *Muſquetiers fall off* together, or at the moſt, to the *right* and *left* by *diuiſion*, how manie ſo euer they bee: For there are manie more curious to make vnlawfull gaines by their company, then careſull to performe a duetie belonging to their charge.

I haue ſeene another maner of *falling away*, uſed by the *Engliſh*, which is by *Counter-march*, thus: when the firſt *Ranke* hath *giuen fyre*, all thoſe of the *ranke* turneth together to the *right hand*, and *marcheth* downe through the diſtances betweene the *Files*, while they come to the *Reare*, and likewiſe the ſecond *Ranke*, & all the reſt one after another: And it is chiefelie uſed in a *Phalanx amphiſtomus*, where the halfe of the *Ranks* of the *Muſquetiers giues fyre* in the *front*, and the other halfe in the *Reare*, when they

Countermarch to the *diviſion*, which is made through the *middle* of the *Rankes*: But to performe this, the *Files* muſt bee at *open order*, and they muſt bee verie expert *Muſquetiers*.

They uſe another forme of *giuing fyre* in the *Front* without anie *falling away*, thus: when the firſt *ranke* hath *giuen fyre*, it ſtandeth ſtill, the R*anke* next it, paſſeth vp through the ſame R*anke*, and *preſenteh* in due diſtance before it, and *giueth fyre*: the third *Ranke* paſſeth through them both, and *giueth fyre* before them, and ſo the reſt of the *ranks* ſucceſſiuelie, till the *bringers-vp* haue *giuen fyre* in the *Front*: But I thinke this not ſo fit for ſeruice, as to ſhow the varietie of exerciſe.

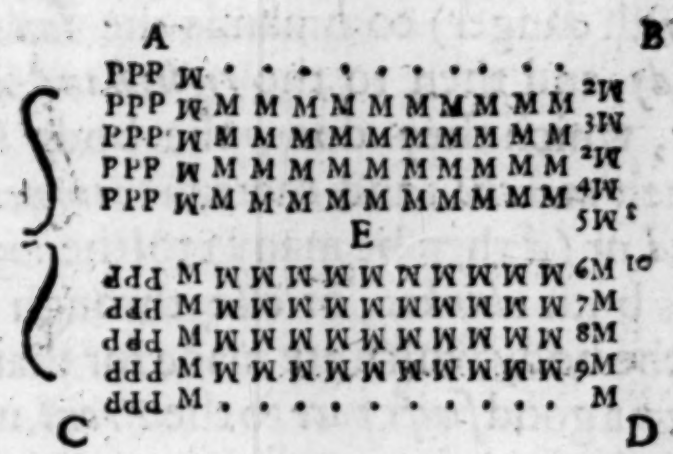
If the Commander pleaſe to make more execution againſt the enemie, hee may command the ſecond R*anke* to double the firſt, and to *giue fyre* altogether, ſo that for fiue ſhotte, hee may ſhoote ten, and for ten twentie.

The uſe of this exerciſe is to *advance* and to *charge* the Enemie if yee bee ſtronger than he, and to gaine ground vpon him.

But if ye deſire not to gaine ground, as beeing more fite to defend, then offend, yee may make the R*ankes giue fyre*, where they ſtand without *advancing*, and *fall away* to the *right*, or to the *right* and *left*, as before.

If ye ſuſtaine a *charge* both in *Front* and R*eare*, then they who hath *giuen fyre*, *falleth away* to either hand, and joynes in the the *diviſion* made through the *middle* of the *Battell*, betweene the two *middle rankes*, as in the figure following.

A B C D



A B C D is a *winge* of 100 *Muſquetiers*, whereof the one halfe of the *rankes giues fyre* in the *Front* A B, The other halfe of the R*ankes giues fyre* in the R*eare* C D: and the R*anks* that hath *giuen fyre* both of A B and C D, to wit the firſt and the tenth, *falles away* to the *right* and *left hand*, and joynes in the *diuiſion* E, euerie man toward his owne *Front*: the R*ankes* next them *preſentes*, *giues fyre*, and *falles away*, as the former, and ſo all the reſt. Or elſe they may *fall away* by *Countermarch*, as I haue ſaid before: but in ſo doing, they muſt bee expert *Muſquetiers*, and carie their *Peeces* aright, otherwiſe they will diſturbe the whole R*anks*: And it is a verie comelie ſight to ſee this Battell, when the *pickes* are charged, both to the *Front* & R*eare*, & the M*uſquetiers* doing their duetie, that is, *giuing fyre*, and *falling away* by *Countermarch*, gracefullie and with readineſſe, as I haue ſeene the Souldiers of the *Artillerie Garding* doe it moſt exactlie.

How to Giue fire in the Reare.

The ſecond way of *Giuing fyre* is in *Reteiring* from the Enemie, and then they *giue fire* in the R*eare*, which is in this manner: The *Captaine marching* in the R*eare*, (for that is his place in a *retreit*

from the Enemie (honour beeing alwayes accompanied with danger) commands the *laſt* R*anke* to *make ready*, and then to the *right hand about*, and *giue fire*, which they doe, the body ſtill continuing their *marche*, and thereafter *turnes off* to the *right hand*, or (if they be many) to the *right* & *left* towardes both *flankes*, or elſe through the *diuiſiones* of the body which are made for that end, and *marches vp* a good *ſwift pace* to the *Front*, where euerie man falles in the *front* of his own *File*: As ſoone as the *laſt* R*ank* is turned to *giue fire*, the next R*ank* *makes ready*, and when the laſt *Ranke* is *fallen off* and *marched away*, it *turnes about*, *giues fire*, *falls off*, and doth all as the former did, and ſo all the reſt of the R*ankes* ſucceſſiuelie one after another, as in the figure following.

FGHI is a *winge* of an 100 M*uſquetiers* *Retiring* from the enemie: where yee ſee the 10 R*anke* in the R*eare* hath *giuen fire*, turned to the *right hand*, *divided* it ſelfe, and *fallen away* the on halfe through the *diviſion* H F betwixt the M*uſquetiers* and the *Picks*, the other halfe through the *diviſion* K, and are *marching* away vp to the *front*, but

if yee would keepe the bodie of your *Musquetiers* whole, ye may make the *Ranke* which giues fyre, divide it selfe, and the one halfe *fall away* to the *right hand*, the other to the *left*, so that the halfe which *falls away* through the *division* K shall *fall away* by the *Flanke* I G. The ninth *Ranke* hath turned about and *presented*, and after it *giueth fyre*, divideth it selfe, and *marcheth away* as the former, and so doeth all the *Rankes* successiuelie, one after another continueing still their *march*, and *giuing fyre* vpon the Enemie.

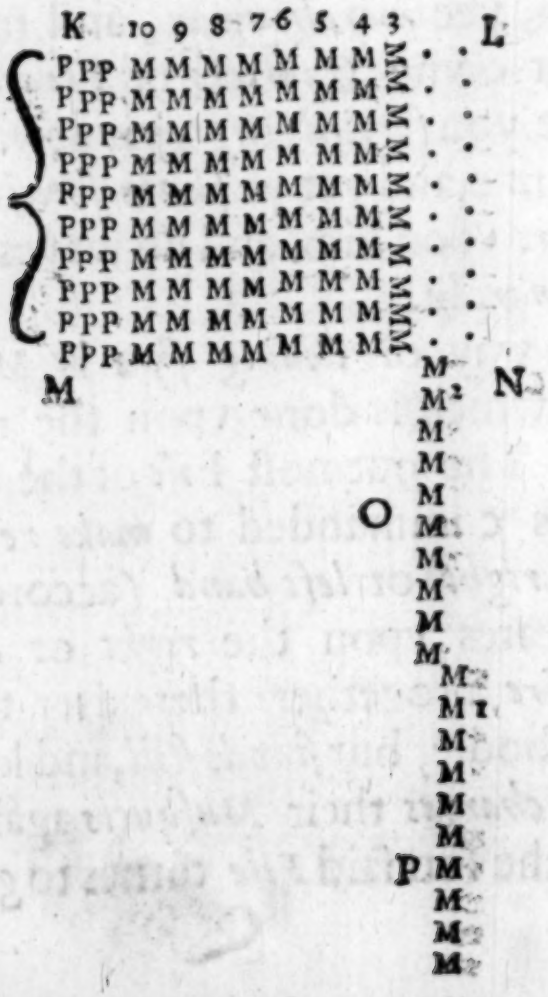
If yee would make more execution vpon the Enemie, yee may make the penult R*anke* double the *last*: as I show before in doubling the *Front*.

The use of *Giuing fyre* R*eteiring* is, when the Enemie is stronger than you, and followes you in the *Reare*, yee beeing much weaker, and not able to encounter him, yee *march away*, and makes haste to gaine your owne *Quarters* or *Trenthe* or *Forte*, from whence you *sortied*, or to joyne with moe of your owne armie, and yet ye *skirmish* with the Enemie *giuing fyre* vpon him, and no wayes hindering your owne *marche*.

How to Giue fire on the Flankes.

The third way of *Giuing fyre* is, *Marching* by an Enemie, which is done vpon the *Flanks* after this maner. The outmost F*ile* of the *Flanke* next the Enemie is commanded to *make ready* and to turne to the *right* or *left hand* (according as the Enemie appeares vpon the *right* or *left wing*) and to *giue fire* altogether: thereafter they *march* not with the bodie, but *stands still*, and keepes their ground, and *charges* their *Musquets* againe: Now whensoeuer the foresaid *File* turnes to *giue fire*, the

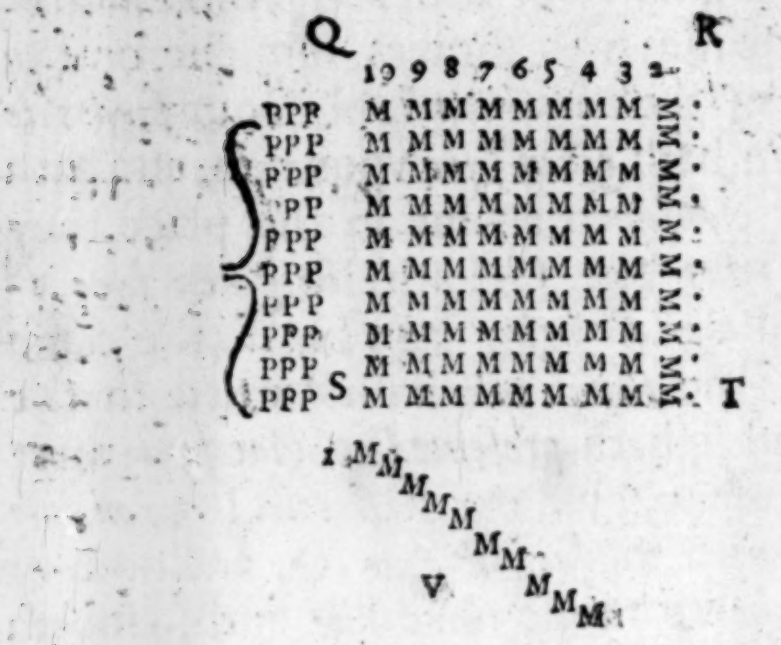
next *File* vnto it *makes readie*, keeping alwayes along with the Body, till its *bringer-up* bee paſt a litle beyond the *leader* of the *File* that *gaue* laſt *fyre*, and then the whole *File* muſt turne and *giue fire*, and doe all as the former did. Thereafter the *firſt File marches up* and joynes with the *ſecond File*: Aſſoone as the *ſecond File* turnes to *giue fyre*, the *third* File which is now outmoſt towards the Enemie, *makes ready*, *turnes about*, *giues fyre*, and doth all as the other two, and ſo the reſt one after another: and then the *firſt two Files* marcheth vp to the *third*, and thoſe *three* to the *fourth* after it hath diſcharged, and ſo foorth all the reſt till the whole *wing* of *ſhotte* be gathered together, and then they all *marche vp*, and joyne in equall *front* with the *Pickes*: as yee ſee in the figure following.



KLMN is a *winge* of 100 *Muſquetiers marching* by an Enemie who ſhowes himſelfe on the *right* Flanke of the *Battallion* LN: Your *firſt File* P. towards him, hath *giuen fyre* vpon him, and hath *charged* their *Muſquets* againe in the place they ſtood : The *next File*. O. hath alſo *giuen fyre* vpon him, and are *charging* againe in the ſame ground alſo, the *third File* hath turned to the *right hand*, and ſo hath *preſented* to *giue fyre*: after which, yee muſt imagine the *firſt File*. P. to *march* vp and joyne with the *ſecond File*. O. and both of them to *marche* vp to the *third File*, and ſo foorth till the whole *wing* gather and joyne together againe after they haue *given fyre*.

The like yee may vnderſtand if the Enemie appeare vpon your *left wing*, for then the *left hand File* is to turne about to the *left*, and to *giue fyre*, vpon the Enemie, and to doe all as the *right hand File* hath done: and ſo the reſt of the *Files* in the *left wing* doe after the like manner, as thoſe of the *right*, obſerving only the diverſitie of the hand: Or if the Enemie bee on both your *Flankes*, yee may make both your *Flankes* doe as one hath done.

Although this forme of *Gathering together* of the *Files* which I haue ſhowne, bee moſt uſuall, yet there is many good *Commanders* who diſlike it, and thinkes it better that the *File* which hath *giuen fire* doe not ſtand longer than they be free of the body, but *turning* a little to the *left*, *marche* immediatly vp to the other *ſide* betweene the *Picks*, and the *wing* of *Muſquetiers*, where there is a *diſtance* left for that effect.



Heere yee see the *first File*. V. hauing *given fire* and beeing free of the body is *marching* up the *diuision* Q. S. to joyne with the rest on the *left side* betweene the *Picks* and the *Musquetiers*: the *second File* doth the like, and so all the rest one after another: but in this the whole *wing* in *marching* is to edge a litle to the *right*, that it may keepe the *diuision* cleare and free to receiue the *Files* as they *giue fyre*: This they thinke doth not so much dismember the body as the other, nor yet oppose the *Files* so muche to the Enemies *shotte* for when three *Files* stands one before another they make a great proppe to the Enemie: But I leaue euerie one to their owne opinion, for *Martiall Commanders* differs amongst themselues, in points of exercise, euerie one following the custome of his owne Countrey.

If yee wonld *Giue more fyre* vpon the Enemy

yee may make the *ſecond* File to double the *firſt*, and both to *giue fire* together, and ſo, through the reſt of the *files*, as I ſhew before in *giuing fire* by *doubling* of *Rankes* in the *front* or the *Reare*.

The uſe of *Giuing fyre* in the *Flankes*, is when the Enemy appeareth on either of your *Flankes* to *charge* you, and ye not able to ſuſtaine his *charge*, yee *marche away* by him in good order, and *giues fyre* vpon him: and if hee would continue his *march* with youres thinking to haſten and cut off your paſſage, or come betwixt you and your *retreete*, yee may make as much haſte as he, and yet ſuſtaine *skirmiſh* with him.

A Collection of the VVords of Command which are moſt neceſſare in exerciſe and ſeruice.

Tit. 12.

IN this treatiſe I haue ſet downe ſundrie *Motions* with their *wordes of Command*, more to ſhow the varietie of *exerciſe* than to approue them as ſteadable in *Service*: Therefore I haue made heere a collection of the *words of Command*, which are moſt neceſſaric in the *exerciſe* of *Motiones*, and uſefull in *Service*. Our *Scotts* words, I haue ſet downe in the *right hand* Columne, the *Engliſh* in the *left*: But the *wordes* of *Command* for the *Poſtures* of the *Picke* and the *Muſ-*

(a) Supra Tit. 5.

quet I ſhew you (*a*) before: Your *Company* then beeing orderlie drawne vp and ſtanding at a due *diſtance*, both in R*ankes* and *Files* which is *open order*: The *Captaine* or other Officer, after he hath commanded *Silence*, hee begins.

Stand right in your Rankes and your Files.
To the right hand.
To the left hand.
To the right and left hand by diviſion.
To the right hand about.
To the left hand about.
Half Files to the right or left hand about.
} *As yee were.*

Stand right in your Ranks and your Stringes.
Right about.
Left about.
Right and left about
Right round about.
Left round about.
} *To your firſt order.*
Sixt Ranke right or left round about.

Rankes to the right hand double.
Rankes to the left hand double.
} *Ranks as yee were.*

Double your Rankes to the right hand.
Double your Rankes to the left hand.
} *Rankes to your firſt order.*

Bringers vp double your Front to the right hand.
Bringers vp double your Front to the left hand.
} *Bringers vp as yee were.*

Tenth ranke to the right hād aduance to the frōt
Tenth ranke to the left hād adoance to the Frōt.
} *Tenth Rank to your firſt order.*

Middlemen, or Half Files to the right hand double your Front.
Middlemen or Half Files to the left hand double your Front.
} *Halfe Files as yewere.*

Sixt Ranke to the right hād advance to the Frōt.
Sixt Rank to the left hād advance to the Front.
} *Sixt rāk to your firſt order.*

Halfe

Halfe Files to the right double your Frõt enteare.
Halfe Files to the left double your Front enteare
Halfe Files double your Front to the right and left by diuiſion.
} *Halfe Files as ye were.*

Files to the right hand double.
Files to the left hand double.
} *Files as ye were.*

Rankes file to the right hand.
Ranks file to the left hãd.
} *File rãk as yee were.*

Rankes file to the right and left by diviſion.
} *Fils rãk as yee were.*

Files Countermarch to the right hand.
Files Countermarch to the left hand.
Rankes Countermarch to the right Flanke.
Rankes Countermarch to the left Flanke.

Files cloſe to the right hand.
Files cloſe to the left hand.
Files cloſe.
} *To your order or cloſe order.*

Double your Stringes to the right hand.
Double your Stringes to the left hand.
} *Strings to your firſt order.*

Strings to the right hand Countermarh.
Stringes to the left hand Countermarch.
Rankes to the right hand Countermarch.
Rankes to the left hand Countermarch.

Cloſe your Stringes to the right hand.
Cloſe your Stringes to the left hand.
Cloſe your Stringes.
} *To your ſecond or third diſtance.*

Cloſe your Rankes to your order or cloſe order.

Files Open to the right hand.
Files Open to the left hand.
Files Open
} *To your open order, or any order elſe.*

Rankes Open to your open order or anie order elſe.

Wheele your Battell to the right hand.
Wheele your Battell to the left hãd.
Wheele your Battell to the right hand about.
Wheele your Battell to the left hand about.

Rankes cloſe to your ſecond or third diſtance.

Open your Strings to the right hand.
Open your Stringes to the left hand.
} *To your firſt diſtance or*
Open your Stringes.
} *any diſtance elſe.*

Open your Ranks to your firſt diſtance or any diſtance elſe.

The great turne to the right about.
The great turne to the left about.
The great turne to the right round about.
The great turne to the left round about.

The wordes of Command for the exerciſe of *Muſquetiers*.

The wordes for Giuing fire in the Front.

Firſt Ranke make ready,
Advance before the Front ſixe paces,
Preſent and giue fire.
Fall away orderly to the right or to the left hand, or to both by diviſion.
Next Ranke doe the like,
All the reſt follow.

For Giuing Fire in the Reare.

Laſt Ranke make ready,
To the right about preſent, and giue fire.

Fall

Fall off to the right or left hand, or to both by diuision.
March vp to the Frone.
Next last Ranke doe the like.
All the rest follow.

For Giuing fire in the Flanks.

Right or left hand File, make ready.
To the right or left hand present & giue fire.
Keepe your ground and charge your Musquets againe.
Next File to the right or left hand present and giue fire.
Keepe your ground and charge your Musquets againe.
The rest of the Files doe the like.
First File marche vp and ioyne with the second: Marche vp both and ioyne with the third and so foorth.

AND this much for exercising of *foote Companyes*, in their *Postures* and *Motions*. I intended to haue spoken of the Duetie and Charge of euerie *Officer* of *foot*; and of the *Embattelling* and *Encamping* of *Footemen*, if I had not beene pressed with shortnesse of time, and diverted by sundrie distractiones, besides the leevying of my Company, and chiefly by a little præparation which I haue made for the plantation of *New Scotland*, in *America*: A Worke so Noble, so Glorious, so conducible to the honour, and commodity of this *Kingdome*, that the like hitherto, was neuer intended. The Author whereof, although his rare Vertues, bee not now according to their right acknowledged by vs, yet

ensueing times will approue them, and proue him to haue beene the Glorie of his Age.

If in this treatise I haue committed any errour, I submitt my selfe to the judement and censure of the Learned and experimented Souldier, whose amendation I craue: As for the envious Thrasonicall Critick, who will still be carping that which hee vnderstands not, I disdaine him, I defy him. If in this I bring any profite to my Countrie-men, it shall encourage mee with the first opportunity God-willing, to proceed and set foorth somewhat of the exercise of *Cavalerie*: and also of the forme of erecting any regular, or irregular figure of *Fortification*, with the manner of assayling, and defending a *Fort*; and that more, to allure others of better vnderstanding, to employ their pen, and publish more perfectly in this subject, then that I esteeme any thing of mine worthy of light: avouching only this, that in a true affection to my KING and my Country, and in a firme resolution to spend the last drop of my Blood in their seruice, I shall bee Inferiour to no Man liuing.

FINIS.

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Wm Macmath.

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